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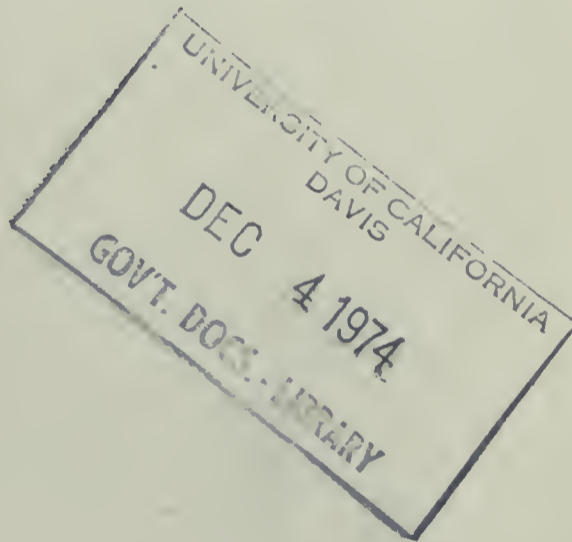
STATE OF CALIFORNIA  
The Resources Agency

Department of Water Resources

BULLETIN No. 130-73

# HYDROLOGIC DATA: 1973

## Volume III: CENTRAL COASTAL AREA



OCTOBER 1974

**NORMAN B. LIVERMORE, JR.**  
*Secretary for Resources*  
The Resources Agency

**RONALD REAGAN**  
*Governor*  
State of California

**JOHN R. TEERINK**  
*Director*  
Department of Water Resources





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The Resources Agency  
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Volume III: CENTRAL COASTAL AREA

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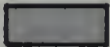
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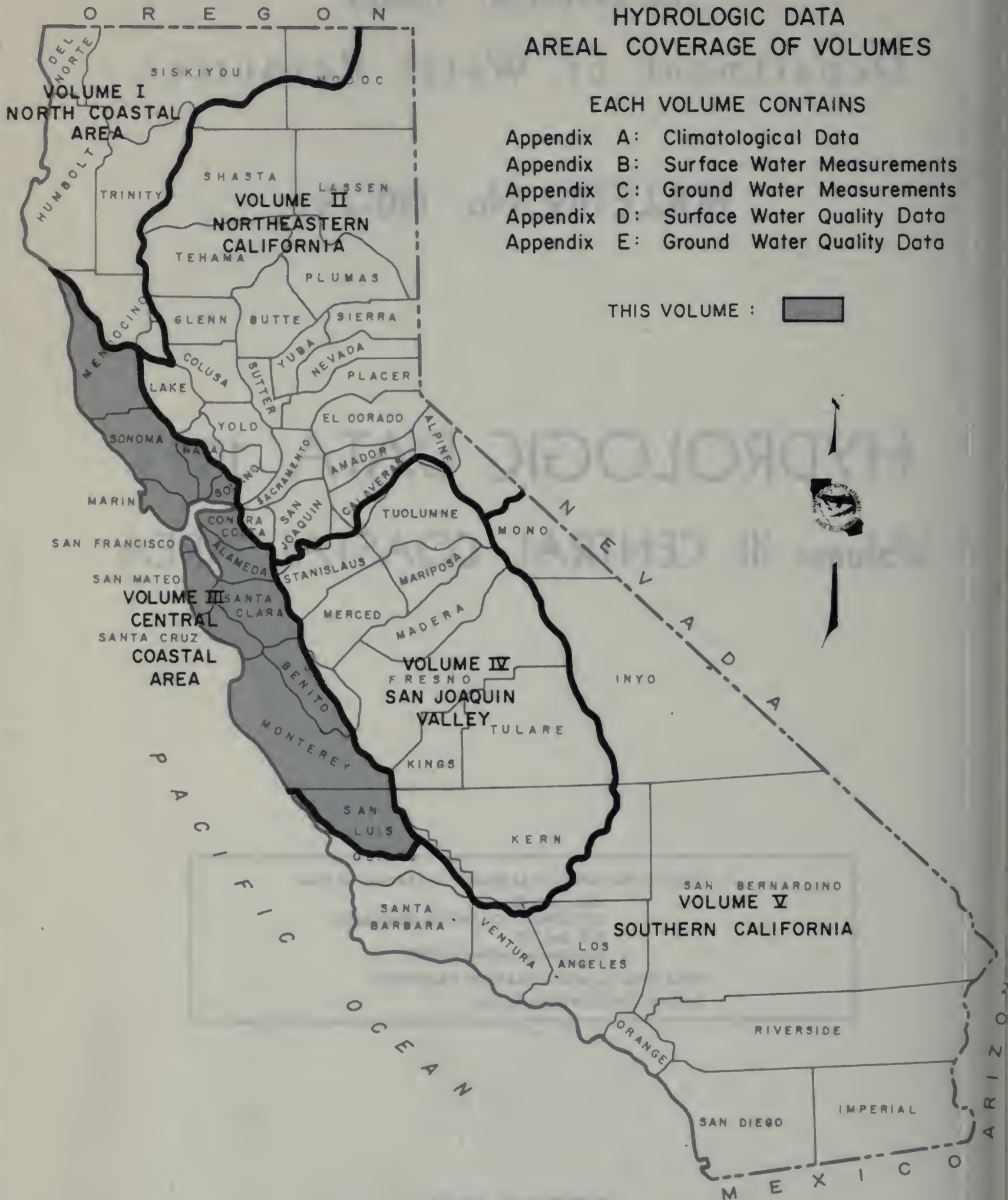
JOHN R. TEERINK  
*Director*  
Department of Water Resources

# HYDROLOGIC DATA AREAL COVERAGE OF VOLUMES

EACH VOLUME CONTAINS

- Appendix A: Climatological Data
- Appendix B: Surface Water Measurements
- Appendix C: Ground Water Measurements
- Appendix D: Surface Water Quality Data
- Appendix E: Ground Water Quality Data

THIS VOLUME : 





## FOREWORD

The hydrologic data programs of the Department of Water Resources supplement the data collection activities of other agencies and help satisfy the needs for data on the quality and quantity of water in the State. Bulletin No. 130-73 presents accurate, comprehensive, and timely hydrologic data which provide a more complete knowledge of the factors affecting our environment and are prerequisites for effective planning, design, construction, and operation of water facilities.

The Bulletin No. 130 series is published annually in five volumes. Each volume presents hydrologic data for one of five reporting areas of the State. These areas are delineated on the map on the opposite page.



John R. Teerink, Director  
Department of Water Resources  
The Resources Agency  
State of California  
August 13, 1978

## METRIC CONVERSION TABLE

ENGLISH UNIT	EQUIVALENT METRIC UNIT
1 Inch (in.)	2.54 Centimeters
1 Foot (ft.)	0.3048 Meters
1 Mile (mi.)	1.609 Kilometers
1 Acre	0.405 Hectares
1 Square mile (sq.mi.)	2.590 Square kilometers
1 U. S. gallon (gal.)	3.785 Liters
1 Acre-foot (ac.ft.)	1,233.5 Cubic meters
1 U. S. gallon per minute (gpm)	0.0631 Liters per second
1 Cubic foot per second (cfs)	1.7 Cubic meters per minute
1 Part per million (ppm)	1 Milligram per liter (mg/l)
1 Part per billion (ppb)	1 Microgram per liter (ug/l)
1 Part per trillion (ppt)	1 Nanogram per liter (ng/l)
1 Equivalent part per million (epm)	1 Milliequivalent per liter (me/l)
Degrees Fahrenheit (°F)	$5/9 (°F-32)$ Degrees Celsius (°C)

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State of California  
The Resources Agency  
DEPARTMENT OF WATER RESOURCES

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Water Resources Evaluation Section



## ACKNOWLEDGMENTS

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### Federal

National Weather Service  
U. S. Army, Corps of Engineers  
U. S. Army, Post Engineer, Fort Ord  
U. S. Bureau of Reclamation  
U. S. Coast Guard  
U. S. Geological Survey  
U. S. Soil Conservation Service

### State

Department of Health  
Department of Veterans Affairs  
Division of Highways  
Division of Forestry  
Regional Water Quality Control Board,  
Central Coast Region, North Coast  
Region, and San Francisco Bay Region  
University of California,  
Agricultural Extension Service  
Water Resources Control Board

### Local

Alameda County Flood Control and  
Water Conservation District  
Alameda County Water District  
City of San Francisco  
City of Vallejo  
East Bay Municipal Utility District  
Marin County  
Mendocino County  
Monterey County Flood Control and  
Water Conservation District  
Napa County Flood Control and  
Water Conservation District  
San Benito County  
San Luis Obispo County Flood Control  
and Water Conservation District  
Santa Clara Valley Water District  
Santa Cruz County  
Solano Irrigation District  
Sonoma County Flood Control and  
Water Conservation District  
South Santa Clara Valley Water  
Conservation District

## ABSTRACT

Report contains tables showing data on climate, surface water flow, change of ground water levels, and surface and ground water quality in the Central Coastal Area for the 1972-73 water year. Figures show the location of climatological observation stations and ground water basins; the fluctuation of average ground water level; fluctuation of water level in wells; the location of surface water measurement and surface water quality stations; and hydrographic unit boundaries.

## INTRODUCTION

This bulletin contains data regarding climate, surface water, ground water levels, and surface and ground water quality. The data were collected by the Department of Water Resources and by various organizations cooperating with the Department.

The Department's files contain some data that currently are not being published. Inquiries regarding local data should be directed to the District Offices listed as follows:

Central District  
P. O. Box 9137  
3251 S Street  
Sacramento, CA 95816

San Joaquin District  
P. O. Box 2385  
3374 East Shields Avenue  
Fresno, CA 93723

Northern District  
P. O. Box 607  
2440 Main Street  
Red Bluff, CA 96080

Southern District  
P. O. Box 6598  
849 South Broadway  
Los Angeles, CA 90055

Inquiries regarding statewide data should be directed to the Division Office:

Division of Resources Development  
P. O. Box 388  
1416 Ninth Street  
Sacramento, CA 95802

Federal and local agencies also are maintaining substantial data files. A partial listing follows:

### Federal Agencies

U. S. Army, Corps of Engineers  
Sacramento District  
650 Capitol Mall  
Sacramento, CA 95814

U. S. Army, Corps of Engineers  
San Francisco District  
100 McAllister Street  
San Francisco, CA 94102

U. S. Department of the Interior  
Geological Survey  
Water Resources Division  
855 Oak Grove Avenue  
Menlo Park, CA 94025

U. S. Department of the Interior  
Geological Survey  
Water Resources Division  
2800 Cottage Way  
Sacramento, CA 95825

U. S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Regional Office  
2800 Cottage Way  
Sacramento, CA 95825



Local Agencies

Alameda County Flood Control and  
Water Conservation District  
399 Elmhurst Street  
Hayward, CA 94544

Alameda County Water District  
38050 Fremont Boulevard  
Fremont, CA 94537

City of San Francisco  
855 Harrison Street  
San Francisco, CA 94107

East Bay Municipal Utility District  
2130 Adeline Street  
Oakland, CA 94623

Marin Municipal Utility District  
220 Nellen Avenue  
Corte Madera, CA 94925

Monterey County Flood Control and  
Water Conservation District  
Court House  
Salinas, CA 93901

Napa County Flood Control and  
Water Conservation District  
1125 First Street  
Napa, CA 94558

Pacific Gas and Electric Company  
245 Market Street  
San Francisco, CA 94106

Santa Clara Valley Water District  
5750 Almaden Expressway  
San Jose, CA 95118



## Appendix A

### CLIMATOLOGICAL DATA

This appendix contains monthly precipitation data for certain climate stations for the 1973 water year, October 1, 1972, through September 30, 1973. Additional precipitation data, as well as data concerning air temperature, wind, and evaporation, are available in the National Weather Service's publications "Climatological Data - California"; and, for particular key stations, "Local Climate Data". These publications can be obtained from:

Superintendent of Documents  
Government Printing Office  
Washington, D. C. 20402

Other agencies within the area covered by this report have established their own supplemental rain gage networks. Some of these agencies are: Alameda County Flood Control and Water Conservation District; City of San Francisco; Contra Costa County Flood Control and Water District; East Bay Municipal Utility District; Marin Municipal Water District; Marin County Department of Public Works; Monterey County; San Benito County; San Luis Obispo County Flood Control and Water District; Santa Clara Valley Water District; Santa Cruz County Department of Public Works; Sonoma County Water Agency; U. S. Department of the Army, Corps of Engineers, San Francisco District.

Each station in this appendix has been assigned an identification number. The letter and first digit denote the hydrographic unit as shown below. The remaining digits denote the sequence of the station in alphabetical order.

#### Central Coastal Area

D0 Santa Cruz Coast  
D1 Pajaro-San Benito Rivers  
D2 Lower Salinas River  
D3 Upper Salinas River  
D4 Monterey Coast  
T9 Upper Salinas River

#### San Francisco Bay Area

E0 San Francisco Bay  
E1 Coast-Marin  
E2 Marin-Sonoma  
E3 Napa-Solano  
E4 East Bay  
E5 Alameda Creek  
E6 Santa Clara Valley  
E7 Bayside-San Mateo  
E8 Coast-San Mateo

#### North Coastal Area

F8 Mendocino Coast  
F9 Russian River

LEGEND

TYPE OF DATA

- ● ① PRECIPITATION ONLY
- ⊖ ● PRECIPITATION, STORAGE
- ● ⊖ PRECIPITATION AND TEMPERATURE
- ⊖ ● ⊖ PRECIPITATION, TEMPERATURE AND EVAPORATION

TYPE OF GAGE

- NON-RECORDING
- RECORDING
- ① BOTH TYPES

- E2 HYDROGRAPHIC SUB-AREA NUMBER
- HYDROGRAPHIC AREA BOUNDARY
- - - HYDROGRAPHIC SUB-AREA BOUNDARY



KEY TO SHEETS

CLIMATOLOGICAL OBSERVATION STATIONS 1972 - 73





CLIMATOLOGICAL OBSERVATION STATIONS 1972-73







TABLE A-1

PRECIPITATION IN CENTRAL COASTAL AREA  
DURING WATER YEAR 1973

This table summarizes monthly precipitations totals for selected stations for the 1973 water year, October 1, 1972, through September 30, 1973. The table shows each station's assigned number in accordance with the explanation given in the introduction to this appendix. Location is shown by latitude and longitude in degrees to the third decimal.

Precipitation values are shown to the nearest hundredth (.01) of an inch. Where Fischer & Porter rain gages are used, a zero is shown in the second decimal place, even though these instruments record to only the nearest tenth (.1) of an inch. The following notations are used to qualify the values:

.00- No record or incomplete record

B Record began

E Wholly or partially estimated

N Record ends

.00T Trace, an amount too small to measure

The county code shown for each station is in accordance with the Standard California County Codes shown below.

Alameda	60	Marin	21	San Mateo	41
Alpine	02	Mariposa	22	Santa Barbara	42
Amador	03	Mendocino	23	Santa Clara	43
Butte	04	Merced	24	Santa Cruz	44
Calaveras	05	Modoc	25	Shasta	45
Colusa	06	Mono	26	Sierra	46
Contra Costa	07	Monterey	27	Siskiyou	47
Del Norte	08	Napa	28	Solano	48
El Dorado	09	Nevada	29	Sonoma	49
Fresno	10	Orange	30	Stanislaus	50
Glenn	11	Placer	31	Sutter	51
Humboldt	12	Plumas	32	Tehama	52
Imperial	13	Riverside	33	Trinity	53
Inyo	14	Sacramento	34	Tulare	54
Kern	15	San Benito	35	Tuolumne	55
Kings	16	San Bernardino	36	Ventura	56
Lake	17	San Diego	90	Yolo	57
Lassen	18	San Francisco	80	Yuba	58
Los Angeles	70	San Joaquin	39		
Madera	20	San Luis Obispo	40	Oregon	61
				Nevada	62
				Arizona	63
				Mexico	64



TABLE A-1 (Cont.)

## PRECIPITATION IN CENTRAL COASTAL AREA DURING WATER YEAR 1973

CO	STA NO	LAT	LONG	ELEV	STATION NAME	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
07	E40006400	37.866	122.033	410	ALAMO LN	.00-	2.89	5.93	1.75	9.84	6.38	2.60	.22	.01	.00T	.00	.00	.00-
21	F90013500	37.941	122.638	680	ALPINE DAM	57.32	7.76	10.06	5.73	14.97	10.86	5.71	.18	.00	.00	.00	.00	2.05
60	E50014600	37.761	121.778	675	ALTAMONT	22.01	2.08	5.24	2.13	5.25	4.21	2.64	.32	.00	.00	.00	.00	.14
43	E60016700	37.433	121.966	8	ALVISO	21.68E	2.37	5.21	1.31	4.61	5.82	2.18	.17	.01	.00	.00E	.00E	.00E
28	E30021200	38.571	122.434	1815	ANGWIN PACIFIC UNION C	51.46	4.35	8.43	4.79	18.04	9.99	4.58	.26	.07	.00	.00	.00T	.95
44	D00024600	37.018	121.884	880	APTOS 3NNE	.00-	3.98	11.92	5.10	10.68	.00-	4.82	.00-	.06	.02	.00	.01	.33
60	E50031200	37.616	121.750	700	ARROYO DEL VALLE SAN	21.78	2.39	4.59	2.39	5.59	3.65	2.69	.28	.00	.00	.00	.00	.20
27	D20032200	36.233	121.483	800	ARROYO SECO	33.96	4.23	6.44	1.50	8.26	11.07	2.46	.00	.00	.00	.00	.00	.00
28	E30036800	38.433	122.250	1660	ATLAS ROAD OUTRA	.00-	3.90	6.50	5.00	.00-	.00-	4.50	.00	.10	.00	.00	.00	.00-
21	F10057200	38.043	122.797	50	BEAR VALLEY OLFMA	.00-	5.74	9.10	5.78	16.89	9.90	5.98	.00-	.10	.00	.00	.00-	.00-
44	D00067405	37.083	122.100	504	BEN LOMOND LEMOS	.00-	7.34	14.01	3.85	15.40	21.01	6.00	1.16	.00	.00	.00-	.00-	.00-
44	D00067700	37.083	122.066	720	BEN LOMOND NO. 3	65.29	6.97	15.15	3.51	14.55	19.08	5.57	.13	.00T	.00T	.00	.00	.33
60	E40069300	37.866	122.250	299	BERKELEY	36.57	3.70	6.95	3.13	12.47	6.47	2.94	.14	.01	.00	.00	.00T	.76
27	D40079000	36.250	121.783	235	RIG SUR STATE PARK	60.15	5.20	14.56	2.59	13.76	17.27	6.40	.25	.00T	.00	.00	.00	.12
48	E30081448	38.138	121.868	60	BIRDS LANDING	26.44	3.75	4.61	1.55	7.92	5.47	2.66	.20	.05	.00	.00	.00	.23
43	F60085000	37.300	122.164	2331	BLACK MTN 2 SW	51.98	6.76	8.81	3.29	13.17	13.91	4.88	.14	.07	.00T	.00	.00	.95
21	F90087600	38.194	122.916	40	BLAKES LANDING	.00-	2.95	6.20	5.85	13.00	7.50	3.80	.00	.15	.00	.00-	.00-	.00-
49	F90093302	38.329	122.994		BODEGA HAY 2E	.00-	3.60	14.30	9.70	17.48	9.70	4.60	.35	.45	.00	.00-	.00-	.00-
49	F90093303	38.383	123.050	900	BODEGA HAY 4 N	71.79	5.91	14.32	8.62	22.06	11.08	6.57	.47	.57	.00	.00	.00	2.19
49	F90093400	38.317	123.069	40	BODEGA MARINE LAB	.00-	2.85	8.69	5.23	11.89	7.01	3.59	.25	.00-	.00-	.00-	.00-	.00-
60	E40095404	37.765	122.029	1000	BOLINAS CANYON	33.02	3.15	6.87	3.05	10.05	6.40	3.75	.05	.00	.00	.00	.00	.50
21	E10095430	37.906	122.553		ROLINAS FIRE DIST	.00-	8.06	9.73	7.00	20.14	11.35	5.88	.25	.49	.00	.00-	.00-	.00-
21	F90096900	37.956	122.610	723	BON TEMPE DAM	68.89	8.87	13.40	6.33	18.32	14.79	5.83	.29	.00	.00	.00	.00	1.06
23	F90097300	39.015	123.372	342	BOONVILLE HMS	47.40	3.11	6.16	6.77	13.34	8.09	4.32	.28	.07	.00T	.00	.00	1.26
44	D00100500	37.142	122.195	2175	BOULDER CREEK LOCATFL	73.40	8.40	16.20	5.70	17.70	20.00	7.60	.40	.20	.00	.00	.00	1.20
07	880104100	37.895	121.863	650	BRANCH JAIL	.00-	.00-	16.30	6.50	19.50	18.30	9.30	.10	.70	.00	.00	.00	1.20
27	D30114200	35.800	121.083	925	BRYSON	36.12	3.27	7.49	1.17	10.55	10.72	2.92	.00	.00	.00	.00	.00	.00
01	E70120600	37.583	122.350	10	HURLINGAME	32.97	5.35	5.54	2.97	8.87	7.14	2.80	.30	.00	.00	.00	.00	.00
47	E40121600	37.866	122.083	530	BURTON RANCH	33.79	3.33	6.21	3.12	10.72	6.97	2.85	.15	.01	.00	.00	.00	.43
44	D10124700	37.033	121.833	1275	BUZZARD LAGOON	51.71	3.99	10.71	5.09	11.06	15.87	3.80	1.19	.00	.00	.00	.00	.00
60	E50128100	37.486	121.818	805	CALAVERAS RESERVOIR	30.96	2.75	6.82	3.03	7.31	6.34	3.89	.38	.02	.00T	.00	.00	.42
28	E30131200	38.584	122.582	364	CALISTOGA	45.54	3.34	7.79	5.56	16.11	8.67	3.17	.10	.05	.00	.00	.00	.75
49	F90131202	38.601	122.650	944	CALISTOGA 4NW	48.89	4.24	7.58	5.45	17.65	9.25	3.02	.11	.00	.00	.00	.00	1.25
49	F90131204	38.533	122.633	750	CALISTOGA 4 S4	70.65	4.47	12.38	8.55	25.87	10.59	6.40	.38	.08	.00	.00	.00	2.27
49	F90131206	38.483	122.566		CALISTOGA 5S	58.09	3.86	9.24	4.42	20.67	10.41	5.19	.71	.20	.00	.00	.00	3.39
43	E60137701	37.283	121.950	192	CAMPBELL WATER CO	.00-	3.22	5.74	1.19	5.86	7.09	2.07	.02	.00	.00	.00-	.00-	.00T
27	D40153240	36.539	121.918		CARMEL SANITARY DIST	.00-	3.03	7.30	1.46	6.08	5.25	3.72	.00	.00	.00	.00-	.00-	.00-
27	D40153400	36.483	121.733	425	CARMEL VALLEY	27.49	2.08	5.81	2.31	5.83	6.87	4.54	.16	.02	.00	.00	.00	.07
28	F30153700	38.283	122.358		CARNEROS VALLEY ALFAXAN	.00-	5.83	9.36	3.82	14.49	8.14	3.92	.21	.08	.00	.00-	.00-	.00-
60	E50159700	37.761	121.778	675	CAYETANO CREEK	24.76	3.73	5.57	2.18	5.45	4.83	2.64	.25	.03	.00	.00	.00	.08
49	F90160300	38.533	123.133	1100	CAZADERO 3 W	76.51	4.46	13.21	12.27	22.98	12.92	7.15	.17	.18	.00	.00	.00T	3.17
60	F40164701	37.731	122.128	140	CHAROT FILTERS	32.25	3.54	6.33	3.15	8.78	6.49	3.34	.05	.13	.00	.00	.00	.44
35	D10173900	36.900	121.600	125	CHITTENDEN PASS	27.83	2.02	6.75	1.91	6.49	6.82	3.52	.20	.00T	.00	.00	.00	.12
44	D10173901	36.902	121.604	104	CHITTENDEN	27.58	1.95	6.76	1.91	6.44	6.77	3.48	.18	.00T	.00	.00	.00	.09
35	D10176600	36.715	121.346	900	CIENEGA	25.19	1.99	4.95	2.83	7.06	5.75	2.50	.11	.00	.00	.00	.00	.00
49	F90183800	38.766	122.983	320	CLOVERDALE 3 SSE	56.20	5.53	7.82	6.11	18.73	11.93	4.57	.21	.07	.00	.00	.25	.98
49	F90184001	38.823	122.951	700	CLOVERDALE RANCH	56.78	4.41	8.29	5.62	18.39	13.62	4.65	.21	.07	.00	.00	.20	1.32
23	F90190150	39.243	123.119	880	COLD CREEK RANCH GUNT	.00-	2.75	6.42	6.23	13.16	7.00	4.92	.44	.20	.00	.00-	.00-	.00-
48	F30191900	38.090	121.854	34	COLLINSVILLE	.00-	3.25	4.03	1.65	5.13	4.93	.00-	.00-	.00-	.00-	.00-	.00-	.00-
60	F50195800	37.668	121.748	580	CONCANNON WINERY	19.20	1.20	4.55	2.04	4.71	3.79	2.60	.21	.00	.00	.00	.00	.10
07	F40196200	37.966	121.983	200	CONCORD 3 F	23.48	2.63	4.41	1.96	7.37	4.70	1.93	.32	.02	.00	.00	.00	.14
44	D10204800	36.983	121.800	260	CORRALITOS	.00-	3.40	6.90	2.70	9.70	.00-	4.00	.10	.00	.00	.00	.10	.00
27	F90210500	39.183	123.183	720	COYOTE DAM	25.41	3.12	1.11	6.64	2.08	6.34	3.92	.89	.14	.00	.00T	.00	1.17
07	E40217700	38.033	122.216	12	CROCKETT	30.53	3.28	5.22	2.59	10.64	5.88	2.12	.27	.06	.00	.00	.00	.47
44	D00229000	37.016	122.200	273	DAVENPORT	44.07	5.05	10.15	2.90	7.52	12.55	5.47	.00T	.00T	.02	.00	.00	.41
27	D20236200	36.600	121.866	46	DEL MONTE	22.30	2.40	4.40	1.80	4.80	4.90	3.60	.20	.10	.00	.00	.00	.10
21	F90243700	38.246	122.965	40	DILLON BEACH	.00-	5.20	.00-	6.95	18.35	8.60	4.85	.00-	.10	.05	.00	.00	.00-
60	E50252500	37.698	121.938	450	DUBLIN 1 W	34.91	3.68	7.27	2.71	9.22	7.34	3.67	.72	.02	.00	.00	.00	.28
49	F90255000	38.450	123.066	85	DUNCANS MILLS	52.84	4.27	8.01	4.42	21.48	8.70	4.12	.50	.34	.00	.00	.00	1.00
28	E30258000	38.201	122.303	20	DUTTONS LANDING	33.11	3.38	6.67	2.91	11.71	5.32	2.55	.16	.04	.00	.00	.00	.37
48	F30293400	38.260	122.040	34	FAIRFIELD FIRE STATION	33.55	4.60	6.73	1.67	11.54	5.62	2.71	.19	.14	.00	.00	.00	.35
48	F30293500	38.283	122.033	110	FAIRFIELD 3NNE	.00-	4.70	6.30	.00-	.00-	5.50	.00-	.00-	.10	.00	.00	.00	.20
49	F90313700	38.466	122.858	200	FORFSTVILLE 2 ESE	49.21	4.61	8.79	6.12	15.11	9.43	4.04	.25	.00	.00	.00	.00	.86
23	F80316100	39.445	123.806	80	FORT BRAGG	44.62	3.18	8.02	6.28	10.80	7.87	5.30	.92	.49	.06	.08	.16	1.46
27	D20318600	36.683	121.766	134	FORT ORD	20.57	1.72	5.02	1.56	3.45	5.48	3.21	.06	.02	.00T	.00T	.00T	.05
49	F80319100	38.516	123.250	116	FORT ROSS	47.28	3.89	8.02	4.72	15.52	6.92	5.64	.29	.33	.04	.07	.07	1.77
44	D10323200	37.050	121.816	1495	FREEDOM 8 NNW	.00-	.00-	.00-	3.79	.00-	.00-	.00-	.00-	.00-	.00	.00	.00	.00-
35	D10323800	36.760	121.498	2500	FREMONT PEAK	35.87	2.21	8.54	3.45	7.75	7.56	5.76	.20	.06	.02	.03	.00	.29
35	D10324500	36.948	121.233	1827	FRENCH RANCH	26.14	1.83	7.72	2.09	3.46	6.84	3.75	.30	.00	.00	.00	.00	.15
43	F50338700	37.366	121.486	2140	GERRER RCH	27.88	2.60	6.07	1.80	5.94	8.57	2.46	.31	.00T	.09	.00	.00	.04
49	F90339505	38.733	122.9															



TABLE A-1 (Cont.)

PRECIPITATION IN CENTRAL COASTAL AREA DURING WATER YEAR 1973

CO	STA NO	LAT	LONG	ELEV	STATION NAME	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
49	F80388900	38.656	123.210	500	HEDGEPEETH RANCH	65.88	5.24	8.82	8.60	23.58	11.92	5.05	.56	.10	.00	.00	.00	2.01
35	D10392500	36.416	120.916	2160	HERNANDEZ 2 NW	25.70	1.98	5.23	1.88	4.72	8.29	3.46	.14	.00T	.00	.00	.00	.00
35	D10392800	36.300	120.700	2765	HERNANDEZ 7 SE	.00	2.40	6.00	1.60	5.90	.00	.00	.10	.10	.00	.00	.00	.00
35	D10402200	36.833	121.416	279	HOLLISTER 1 SW	20.02	1.40	5.20	1.53	4.59	4.62	2.40	.25	.03	.00	.00	.00	.00
35	D10402500	36.850	121.400	284	HOLLISTER 2	21.20	1.50	5.60	1.70	4.90	4.50	2.70	.30	.00	.00	.00	.00	.00
35	D10403500	36.916	121.233	2578	HOLLISTER 10 ENE	.00	1.77	7.78	1.81	.00	.00	.00	.00	.02	.00	.00	.00	.13
49	F90448000	38.666	122.666	1800	KELLOGG	.00	4.33	9.57	6.32	20.25	11.05	4.04	.29	.05	.00	.00	.00	.00
21	F20450000	37.946	122.550	80	KENTFIELD	66.83	8.54	12.41	8.17	19.60	12.19	5.04	.06	.02	.00	.00	.00	.80
21	F90450200	37.998	122.708	360	KENT LAKE	104.46	12.99	17.65	10.71	32.81	18.75	9.47	.06	.15	.00	.00	.00	1.87
27	D20455500	36.200	121.133	320	KING CITY	19.19	1.46	4.28	.79	4.25	6.47	1.94	.00	.00	.00	.00	.00	.00
07	E40463300	37.916	122.100	540	LAFAYETTE 2 NNE	33.00	3.27	5.93	3.02	10.86	6.55	2.73	.31	.01	.00T	.00	.00	.32
21	F90465200	37.946	122.594	785	LAGUNITAS LAKE	73.26	8.97	13.57	6.31	20.38	16.55	6.40	.12	.00	.00	.00	.00	.46
41	E80466000	37.316	122.266	670	LA HONDA	45.06	7.69	8.87	2.93	10.30	9.55	4.92	.19	.06	.00T	.00	.00	.55
41	E80466050	37.266	122.250	350	LA HONDA HONOR CAMP 1	.00	8.05	8.08	4.49	14.09	14.03	5.85	.26	.11	.01	.00	.00	.00
60	F50499600	37.691	121.805	405	LIVERMORE SEWAGE PLT	22.82	3.19	5.06	2.17	5.05	4.26	2.54	.44	.04	.00	.00	.00	.07
60	F50499700	37.650	121.783	545	LIVERMORE 2 SSW	22.47	2.98	4.91	2.22	5.50	3.83	2.63	.29	.03	.00T	.00	.00	.08
60	F50499701	37.691	121.838	365	LIVERMORE 3W	22.22	2.59	5.06	2.17	5.05	4.26	2.54	.44	.04	.00	.00	.00	.07
60	F50499702	37.655	121.744	640	LIVERMORE 2 SE	19.23E	2.22	4.17	2.03	4.68	3.24	2.40	.39	.00	.00	.00	.00	1.0E
60	F50499704	37.694	121.815	395	LIVERMORE 2 W	23.53	3.37	4.90	1.70	5.97	4.73	2.41	.41	.00	.00	.00	.00	.04
27	D30501700	35.966	121.083	1104	LOCKWOOD 2 N	21.77	2.33	4.36	.68	5.49	6.29	2.42	.00	.00	.00	.00	.00	.00
43	E60512300	37.216	121.983	428	LOS GATOS	34.71	3.20	6.81	1.90	9.19	10.87	2.71	.00T	.01	.00	.00	.00	.02
44	D00512500	37.183	122.033	2215	LOS GATOS 4 SW	67.44	6.53	12.93	5.38	16.85	20.20	5.01	.16	.04	.00	.00	.00	.44
27	D40518400	35.883	121.450	360	LUCIA WILLOW SPRINGS	47.08	4.92	10.11	1.29	12.59	13.27	4.76	.12	.00	.00	.00	.00	.02
48	E30533300	38.100	122.249	52	MARE ISLAND NAVY	29.45	2.89	5.48	2.50	10.68	5.22	2.29	.06	.02	.00	.00	.00	.31
07	F40537100	37.966	122.133	225	MARTINEZ 3 S	31.26	3.74	5.88	2.31	10.23	6.15	2.09	.54	.00	.06	.00	.00	.26
07	F40537200	37.966	122.100	280	MARTINEZ 3 SSW	29.33	3.52	5.77	2.57	9.01	5.71	2.32	.37	.00	.00	.00	.00	.06
7	E40537207	38.005	122.124	240	MARTINEZ HARBOR VIEW	.00	2.96	4.90	2.17	8.20	4.95	1.89	.00	.00T	.00	.00	.00	.00
07	F40537800	38.016	122.116	40	MARTINEZ WATER PLANT	26.89	2.99	5.16	2.21	9.31	5.11	1.76	.14	.00T	.00	.00	.00	.21
41	F70562680	37.608	122.404	80	MILLBRAE COSTENOAT	.00	6.76	7.00	3.52	10.75	8.22	3.70	.13	.08	.00	.00	.00	.00
43	E60563700	37.116	121.918	1750	MILLHERRY	.00	.40	2.60	1.60	3.20	9.10	.00	.00	.10	.00	.00	.40	.00
21	E20564705	37.896	122.526	150	MILL VALLEY	.00	7.15	10.55	5.45	15.85	8.85	5.30	.00	.25	.00	.00	.00	.00
60	E50571851	37.524	121.884	1400	MISSION CRK T K RCH	33.72	3.30	6.70	2.78	7.21	8.55	4.34	.30	.00	.00	.00	.00	.54
27	D40579500	36.600	121.900	335	MONTEREY	27.56	2.46	5.95	2.08	6.05	5.88	4.52	.13	.06	.02	.02	.05	.44
27	D40579600	36.583	121.883	120	MONTEREY AP	.00	.00	4.42	1.76	4.40	4.65	1.77	.13	.00T	.00	.00T	.00T	.04
43	E60584400	37.133	121.616	225	MORGAN HILL 2 E	29.23	2.88	6.25	1.33	7.41	8.63	2.41	.27	.01	.00	.00	.00	.04
43	D10584600	37.150	121.764	640	MORGAN HILL 6 WSW	.00	.00	.00	1.90	12.42	13.62	3.48	.06	.00	.00	.00	.00	.00
43	D10585300	37.133	121.650	350	MORGAN HILL 5 C S	.00	3.00	7.00	1.20	8.00	9.60	.00	.00	.00	.00	.00	.00	.00
07	E40591500	37.868	121.934	2070	MOUNT DIABLO NORTH GAT	33.69	3.36	7.17	3.17	9.36	6.89	3.43	.15	.00	.00T	.00	.00T	.16
43	E50593300	37.733	121.650	4206	MOUNT HAMILTON	27.75	2.20	6.16	2.91	5.53	5.59	3.98	.50	.10	.00T	.00	.00	.78
44	D10597300	37.016	121.716	1800	MOUNT MADONNA	44.84	2.88	8.69	3.99	10.53	12.98	5.62	.00	.00	.00	.00	.00	.15
21	E20599600	37.900	122.600	1480	MT TAMALPAIS 2 SW	.00	.00	.00	.00	20.00	10.50	6.50	.20	.50	.00	.10	.00	3.20
21	E20602700	37.900	122.566	170	MUIR WOODS	56.24	6.11	9.87	6.32	15.85	8.75	5.26	.16	.65	.00T	.13	.00	3.14
28	E30607400	38.277	122.263	73	NAPA STATE HOSPITAL	34.30	3.34	6.95	3.39	11.37	5.61	3.10	.11	.00	.00	.00	.00	.41
23	F90610500	39.163	123.563	220	NAVARRO 1 NW	43.83	2.40	5.08	7.21	14.02	7.94	5.34	.46	.08	.00	.00	.00	1.30
60	E50614400	37.521	122.028	14	NEWARK	22.10	2.87	5.90	1.70	3.79	5.33	2.05	.39	.03	.00	.00	.00	.04
60	F50614402	37.516	122.031	10	NEWARK 1 S	22.20	2.87	5.90	1.70	3.79	5.43	2.05	.39	.03	.00	.00	.00	.04
21	F90618700	38.056	122.696	205	NICASIO	54.22	7.29	8.00	4.99	17.11	11.72	3.93	.56	.00	.00	.00	.00	.62
60	F50619902	37.568	121.983	62	NILES 1 SW	28.09	3.27	6.03	2.33	6.54	6.13	3.32	.41	.00	.00	.00	.00	.10
60	E50619907	37.560	121.953	75	NILES 2SE	29.24	2.90	6.99	2.12	6.62	6.65	3.24	.51	.00	.00	.00	.00	.21
21	F20629000	38.133	122.716	350	NOVATO 8 WNW	.00	6.59	6.72	3.15	2.70	11.08	3.30	.12	.00	.00	.00	.00	.00
21	E20629001	38.105	122.536	35	NOVATO	42.03	6.13	5.75	3.18	12.79	10.89	3.18	.11	.00	.00	.00	.00	.00
21	E20629002	38.108	122.561	18	NOVATO FIRE HOUSE	42.03	6.13	5.75	3.18	12.79	10.89	3.18	.11	.00	.00	.00	.00	.00
60	E50530000	37.561	121.883	740	N 3 RANCH OFFICE	27.45	2.35	4.94	2.27	7.14	6.78	3.44	.53	.00	.00	.00	.00	.00
60	E40633260	37.838	122.220	500	OAKLAND GLENWOOD GLADE	.00	4.64	7.26	3.55	12.88	7.07	.00	.00	.02	.00	.00	.00	1.09
60	F40633500	37.733	122.200	3	OAKLAND WR AP	28.25	3.89	5.24	2.51	7.37	5.94	2.78	.05	.05	.00T	.00T	.00	.42
60	E40633600	37.850	122.266	200	OAKLAND KEFNEY	34.23	4.25	6.39	3.20	10.43	6.31	2.95	.02	.04	.00	.00	.00	.64
60	E30635100	38.446	122.418	165	OAKVILLE 1 WNW	44.43	3.77	7.11	4.42	16.09	9.12	3.14	.25	.07	.00	.00	.00	.46
28	E30635600	38.398	122.465	1685	OAKVILLE 4 SW NO.2	51.61	4.31	8.22	4.05	18.23	10.80	4.40	.60	.10	.00	.00	.00	.40
49	F90637000	38.412	122.961	960	OCCIDENTAL	66.28	5.64	11.82	7.41	23.16	10.59	5.52	.09	.20	.00	.00	.00	1.85
23	F80651700	38.916	123.301	1300	ORNBAUN MAILLIARD	.00	3.13	6.13	6.44	13.90	.00	.00	.00	.00	.00	.00	.00	.00
35	D10661000	36.733	121.766	950	PAICINES OHRWALL RCH	21.37	1.82	4.16	1.87	4.88	5.39	3.14	.11	.00	.00	.00	.00	.00
43	E60664600	37.445	122.139	43	PALO ALTO CITY HALL	25.75	3.72	6.31	1.49	5.21	6.59	2.27	.16	.00	.00	.00	.00	.00
27	D20665000	36.350	121.500	1835	PALOMA	38.99	5.01	7.39</										



TABLE A-1 (Cont.)

PRECIPITATION IN CENTRAL COASTAL AREA DURING WATER YEAR 1973

CO	STA NO	LAT	LONG	ELEV	STATION NAME	TOTAL	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
27	D20771600	36.033	120.900	440	SAN ARDO	19.18	1.83	3.85	.59	4.83	5.22	2.64	.22	.00	.00	.00	.00	.00
35	D10771900	36.508	121.081	1355	SAN RENITO	22.87	1.62	4.96	1.38	4.81	7.13	2.97	.00	.00	.00	.00	.00	.00
41	E70772650	37.611	122.432	425	SAN ARUNO RUCKER	.00-	6.59	6.83	3.69	10.04	8.31	3.58	.16	.00	.00	.00-	.00-	.00-
41	E70772800	37.505	122.245	5	SAN CARLOS FIRE STA 2	.00-	4.06	5.67	1.87	7.21	6.22	1.96	.00-	.00T	.00T	.00	.00	.01
27	D40773100	36.436	121.708	600	SAN CLEMENTE DAM	32.85	2.85	5.79	2.66	7.59	9.20	4.38	.29	.02	.00	.00	.00	.07
43	D10775500	37.016	121.333	365	SAN FELIPE HIGHWAY STA	.00-	1.75	6.86	1.20	5.39	.00-	2.57	.88	.00	.00	.00	.00	.00-
80	E80776700	37.766	122.500	300	SAN FRANCISCO SUNSET	32.31	4.87	5.97	3.06	9.26	6.29	2.44	.01	.08	.00	.00	.00T	.33
41	E70776900	37.616	122.383	8	SAN FRANCISCO WB AP	31.08	5.24	5.15	2.40	8.32	6.82	2.93	.11	.07	.00T	.00T	.00T	.04
80	E70777200	37.783	122.416	52	SAN FRANCISCO F O B	34.07	5.41	6.40	3.53	9.38	6.32	2.63	.02	.08	.00	.00	.00	.30
41	E80780700	37.303	122.360	245	SAN GREGORIO 2 SE	40.32	5.92	9.19	3.26	8.68	8.21	4.23	.04	.18	.00	.00T	.09	.52
43	E60782100	37.350	121.900	70	SAN JOSE	22.79	2.19	5.48	1.18	5.12	5.97	2.75	.05	.01	.00T	.00	.00	.04
43	E60782401	37.316	121.950	90	SAN JOSE DECID F F 5	22.25	1.80	5.61	1.01	4.75	6.35	2.70	.03	.00	.00	.00	.00	.00T
43	E60782403			220	SAN JOSE HENDRICKS	.00-	8.65	1.03	6.73	8.07	1.86	.03	.00	.00	.00	.00	.00	.00T
35	D10783400	36.816	121.516	615	SAN JUAN BAUTISTA 3SSE	.00-	2.55	6.66	1.81	6.36	.00-	3.39	.00-	.00	.00	.00	.00	.00
35	D10783500	36.844	121.533	200	SAN JUAN BAUTISTA MI	23.03	1.13	6.44	1.77	5.30	5.06	3.32	.00	.01	.00	.00	.00	.00
41	E70786400	37.566	122.316	30	SAN MATEO	27.27	3.50	4.24	2.53	7.13	7.12	2.68	.00	.00	.00	.00	.00	.07
21	E30788000	37.966	122.533	31	SAN RAFAEL	55.27	6.98	9.92	6.29	16.99	11.07	3.66	.16	.00	.00	.00	.00	.20
43	E60791200	37.347	121.940	85	SANTA CLARA UNIVERSITY	.00-	2.17	5.83	1.99	5.18	6.83	3.01	.00-	.00-	.00-	.00	.00	.02
44	D00791600	36.983	122.016	125	SANTA CRUZ	43.67	3.41	10.54	3.38	7.84	12.99	5.01	.05	.04	.00	.00	.00	.41
49	F90796400	38.439	122.753	20	SANTA ROSA SEWAGE PT	40.43	3.50	6.95	4.91	14.03	6.98	3.16	.22	.03	.00	.00	.00	.65
49	F90796449	38.375	122.767	75	SANTA ROSA LAGUNA PLT	41.62	4.06	6.58	4.73	13.46	8.35	3.55	.16	.05	.00	.00	.00	.68
49	F90796500	38.450	122.700	167	SANTA ROSA	42.91	3.47	6.87	5.12	15.38	7.17	3.48	.65	.03	.00T	.00	.00	.74
49	F90796505	38.400	122.700	160	SANTA ROSA 2S	.00-	3.36	6.39	1.71	15.11	7.55	3.14	.38	.00	.00	.00-	.00-	.00-
43	E60799802	37.258	122.126	2600	SARATOGA GAP MAINT	.00-	8.44	13.88	3.24	17.89	18.90	5.08	.00	.00	.00	.00-	.00-	.00-
49	F90807200	38.351	122.811	145	SERASTOPOLE 4 SSE	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00-	.00	.00	.70
49	F90827200	38.677	123.134	1930	SKAGGS SPRING LAS LOMA	73.36	5.48	10.64	7.15	25.39	15.36	6.14	.44	.34	.00	.00	.10	2.32
27	D20827600	36.083	120.666	1730	SLACK CANYON	21.80	2.63	4.12	.63	5.26	6.63	2.49	.04	.00	.00	.00	.00	.00
27	D20833800	36.433	121.316	204	SOLEDAD	17.83	1.70	3.74	1.50	3.10	5.31	2.48	.00	.00	.00	.00	.00	.00
49	E20835100	38.283	122.450	20	SONOMA	42.65	4.58	6.92	4.29	13.79	8.60	3.76	.03	.05	.00	.00	.00	.63
49	E20835103	38.350	122.516	440	SONOMA ST HOSPITAL	60.94	5.70	9.95	6.35	20.40	11.95	5.07	.40	.07	.00	.00	.00	1.05
49	E20835108	38.283	122.533	500	SONOMA 4 W	53.21	3.75	10.30	5.20	17.50	9.87	5.54	.17	.05	.00	.00	.00	.83
27	D20844600	36.600	121.683	60	SPRECKELS HWY BRIDGE	21.92	1.82	4.65	2.18	3.86	5.36	3.84	.16	.02	.00T	.00T	.00T	.03
27	D20844601	36.620	121.657	55	SPRECKELS	18.94	1.30	4.15	1.91	3.51	4.43	3.48	.11	.03	.00	.00	.00	.02
44	D10868000	36.900	121.833	85	SUNSET BEACH STATE PAR	.00-	2.50	6.30	2.20	5.40	.00-	.00-	.00-	.00	.00	.00	.00	.10
23	F90877601	39.133	123.183	413	TALMAGE	.00-	3.28	5.93	6.72	12.95	7.83	3.82	.14	.08	.00	.00-	.00-	.00-
23	F90877602	39.133	123.150		TALMAGE SCS NO 13	.00-	3.32	5.02	5.15	10.71	6.78	2.62	.19	.04	.00	.00-	.00-	.00-
21	E20877850	37.878	122.543		TAM VALLEY GLESSNER	.00-	7.34	11.31	6.77	17.76	9.68	5.77	.09	.44	.00	.00-	.00-	.00-
40	D30884900	35.548	120.705	773	TEMPLETON	28.27	1.44	4.13	1.34	8.00	9.84	3.52	.00	.00	.00	.00	.00	.00
49	F908889500	38.800	122.825	1668	THE GEYSERS	65.35	5.71	9.14	5.79	22.71	15.82	4.74	.20	.07	.00	.00	.15	1.12
21	E20892002	37.901	122.483	65	TIBERON COMEN	.00-	5.68	9.71	4.65	13.74	8.63	3.59	.02	.02	.00	.00-	.00-	.00-
21	F90895400	38.247	122.902	80	TOMALES	34.55	3.19	5.15	3.96	12.64	6.68	2.72	.13	.08	.00	.00	.00	.00
23	F90912200	39.150	123.200	623	UKIAH	41.75	3.25	5.78	7.04	12.62	7.75	4.00	.22	.10	.00	.00	.00	.99
23	F90912400	39.133	123.283	1900	UKIAH 4 WSW	54.21	4.01	7.67	9.19	15.70	9.48	5.67	.47	.18	.00	.00	.00T	1.84
60	E40918500	37.766	122.166	390	UPPER SAN LEANDRO FIL	.00-	3.70	7.02	3.85	11.00	6.89	3.77	.09	.00-	.00	.00	.00	.79
60	E40918501	37.774	122.164	394	UPPER SAN LEANDRO FILT	37.17	3.70	7.02	3.85	11.06	6.89	3.77	.09	.00	.00	.00	.00	.79
35	D10918900	36.633	121.033	2050	UPPER TRES PINOS	.00-	1.03	4.24	1.51	.00-	6.37	2.61	.10	.00	.00	.00	.00	.00
49	F90927300	38.616	123.016	1260	VENADO	74.30	6.60	10.70	8.00	26.20	15.00	5.60	.30	.20	.00	.00	.00	1.70
28	E30930500	38.383	122.366	170	VETERANS HOME	46.95	5.12	7.22	4.53	16.10	9.94	3.26	.17	.05	.00	.00	.00	.56
07	E40942000	37.950	122.083	128	WALMAR SCHOOL	.00-	3.29	5.25	2.33	8.96	4.64	2.10	.39	.00	.00	.00	.00	.00-
07	E40942300	37.883	122.033	245	WALNUT CREEK 2 ESE	28.35	2.76	5.45	2.50	8.96	6.00	2.34	.15	.00	.00	.00	.00	.19
07	E40942600	37.900	122.016	220	WALNUT CREEK 2 ENE	24.49	2.55	4.46	2.00	7.93	5.34	1.96	.14	.00	.00	.00	.00	.11
07	E40942700	37.906	121.994	265	WALNUT CREEK 4 E	25.43	2.59	4.80	2.10	7.57	5.94	2.20	.15	.00T	.00T	.00	.00	.08
49	F90944000	38.716	122.881	224	WARM SPRINGS DAM	.00-	4.95	8.05	5.54	17.69	11.37	4.05	.42	.06	.00	.00-	.00-	.00-
44	D10947300	36.933	121.766	95	WATSONVILLE WATERWORKS	30.12	2.62	6.92	2.10	6.38	8.15	3.77	.05	.00	.01	.00	.00	.12
60	E50952500	37.663	121.723	775	WENTE WINERY	20.22	2.09	4.27	2.28	4.80	3.75	2.54	.26	.00	.00	.00	.00	.23
49	F90975600	38.500	122.880		WOHLER PUMPING PLANT	58.83	5.05	10.38	6.36	21.26	9.87	4.21	.24	.20	.00	.00	.00	1.26
21	F90977000	38.006	122.641	430	WOODACRE	57.44	7.26	9.57	5.63	17.02	12.88	4.88	.17	.03	.00	.00	.00	.00
41	E70979200	37.433	122.250	380	WOODSIDE FS 1	.00-	.00-	.00-	.00-	10.22	7.83	.00-	.24	.03	.00	.00	.00	.40
43	E60981400	37.133	121.950	1600	WRIGHTS	58.73	4.85	11.58	3.34	17.28	16.58	4.73	.12	.00	.00	.00	.00	.25
23	F80985100	38.905	121.312	1120	YORKVILLE	64.70	5.10	9.10	9.30	21.20	12.90	5.30	.10	.10	.00	.00	.10	1.50



## Appendix B

### SURFACE WATER MEASUREMENTS

This appendix contains surface water data for the period from October 1, 1972, through September 30, 1973. These data consist of the amounts of water imported to the report area; daily gage heights; daily tides; and corrections and revisions to previously published reports of surface water data. Station locations are shown on Figure D-1, sheet 2.

In addition to data collected and published by the Department of Water Resources in this appendix, the U. S. Geological Survey collects and publishes data on many additional gaging stations for the same report area. This work is done under a federal-state cooperative contract or through local cooperative arrangements with other local or governmental agencies. The data published in the following reports, together with this report, present a comprehensive analysis of water resources for the area:

1. "Water Resources Data for Colifornia, Part 1: Surface Water Records, Volume I: Colorado River Basin, Southern Great Basin, and Pacific Slope Basins excluding Central Valley". U. S. Geological Survey.
2. Bulletin No. 120, "Water Conditions in California, Fall Issue". Department of Water Resources.
3. Bulletin No. 157, "Index to Stream Gaging Stations in and Adjacent to California, 1970". Department of Water Resources. This index contains the period of record -- with the number of years missing -- and more information for stations in the report area. The index also identifies the agency from which a particular record may be obtained.

TABLE B-1  
SURFACE WATER IMPORTS TO THE CENTRAL COASTAL AREA

IMPORT	1973 Water Year												TOTAL
	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	
<u>CITY OF VALLEJO FROM CACHE SLOUGH</u> a													
Total acre-feet	1,075	986	876	771	1,038	783	1,212	1,459	1,621	1,533	1,459	1,443	14,256
Average cubic feet per second	17	17	14	13	19	13	20	24	27	25	24	24	20
Monthly quantities in percent of seasonal	7.6	6.9	6.1	5.4	7.3	5.5	8.5	10.2	11.4	10.8	10.2	10.1	
<u>CONTRA COSTA CANAL</u> b													
Total acre-feet	6,896	4,472	4,136	3,867	3,554	4,085	4,968	11,719	11,538	14,311	13,363	9,951	92,860
Average cubic feet per second	112	75	67	63	64	66	83	191	194	233	217	167	128
Monthly quantities in percent of seasonal	7.4	4.8	4.5	4.2	3.8	4.4	5.4	12.6	12.4	15.4	14.4	10.7	
<u>HETCH HETCHY AQUEDUCT</u> c													
Total acre-feet	22,320	14,233	9,455	2,299	17,421	12,357	15,739	21,790	21,351	25,158	25,481	24,411	212,010
Average cubic feet per second	363	239	154	37	314	201	264	354	359	409	414	410	297
Monthly quantities in percent of seasonal	10.5	6.7	4.5	1.1	8.2	5.8	7.4	10.3	10.1	11.9	12.0	11.5	
<u>MOKELUMNE RIVER AQUEDUCT</u> d													
Total acre-feet	18,792	16,579	14,408	7,516	8,133	10,125	14,750	18,613	20,810	22,274	22,102	18,634	192,730
Average cubic feet per second	306	279	234	122	146	165	248	303	350	362	359	313	266
Monthly quantities in percent of seasonal	9.8	8.6	7.5	3.9	4.2	5.2	7.6	9.6	10.8	11.6	11.5	9.7	
<u>POTTER VALLEY POWERHOUSE FROM EEL RIVER</u> e													
Total acre-feet	17,320	17,950	12,380	16,900	16,850	16,980	18,540	14,650	8,400	9,140	8,990	16,190	174,290
Average cubic feet per second	282	302	201	275	303	276	312	238	141	149	146	272	24
Monthly quantities in percent of seasonal	9.9	10.3	7.1	9.7	9.7	9.8	10.6	8.4	4.8	5.2	5.2	9.3	
<u>PUTAH SOUTH CANAL</u> b *													
Total acre-feet	5,077	2,477	2,297	1,492	1,743	3,999	12,714	35,673	37,508	37,324	35,651	20,960	196,910
Average cubic feet per second	83	42	37	24	31	65	214	580	630	607	580	352	27
Monthly quantities in percent of seasonal	2.6	1.3	1.2	0.8	0.9	2.0	6.4	18.1	19.0	19.0	18.1	10.6	
<u>SOUTH BAY AQUEDUCT</u>													
Total acre-feet	6,732	8,229	9,193	3,556	263	397	4,602	11,515	12,714	15,008	16,550	8,406	97,160
Average cubic feet per second	109	138	150	58	5	6	77	187	214	244	269	141	13
Monthly quantities in percent of seasonal	6.9	8.5	9.5	3.7	0.3	0.4	4.7	11.9	13.1	15.4	17.0	8.6	

a Data furnished by City of Vallejo.  
b Data furnished by U. S. Bureau of Reclamation.  
c Data furnished by the City of San Francisco.  
d Data furnished by East Bay Municipal Utility District.  
e Data furnished by U. S. Geological Survey.  
\* Amounts are total diversion into the canal; an unknown portion of this is imported to the Central Coastal Area.



**TABLE B-2**  
**DAILY GAGE HEIGHT**  
(IN FEET)

WATER YEAR	STATION NO.	STATION NAME
1973	E31400	RECTOR RESERVOIR NEAR YOUNTVILLE

DAY	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	DAY
1	344.98	345.66	NR	NR	370.35	NR	370.20E	370.02	366.94	362.98	358.42E	353.83E	1
2	344.98	345.65	NR	NR	370.37	NR	370.15	370.00	366.81	362.82	358.28	353.69E	2
3	344.97	345.72	NR	363.07	370.52	NR	370.14	370.00	366.67	362.68	358.12	353.53E	3
4	344.97	345.73	NR	363.12	370.63	NR	370.14	369.97	366.54	362.54	357.99	353.38E	4
5	344.97	345.75	NR	363.21	370.56	370.29	370.13	369.96	366.47	362.39	357.82	353.28E	5
6	344.94	345.76	354.72	363.27	370.80	370.35	370.12	369.96	366.33	362.23	357.68	353.04E	6
7	344.93	345.82	354.91	363.33	370.62	370.33	370.12	369.96	366.18	362.08	357.55	352.92E	7
8	344.92	NR	354.96	363.75	370.50	370.32	370.12	369.90	366.04	361.95	357.39	352.76E	8
9	344.95	NR	NR	367.23	370.60	370.30	370.11	369.84	365.88	361.82	357.25	352.61E	9
10	344.96	NR	NR	368.83	370.69	370.29	370.11	369.73	365.77	361.68	357.12	352.47E	10
11	345.03	NR	NR	370.92	370.53	370.26	370.11	369.62	365.56	361.57	356.97E	352.32E	11
12	345.09	NR	NR	370.70	370.60	370.24	370.11	369.49	365.40	361.42	356.79E	352.18E	12
13	345.11	NR	NR	370.40	370.48	370.21	370.11	369.38	365.26	361.29	356.65E	352.01E	13
14	345.17	NR	NR	370.30	370.54	370.21	370.11	369.25	365.10	361.17	356.53E	351.99	14
15	345.30	NR	NR	370.38	370.45	370.20	370.11	369.13	364.99	361.04	356.37E	351.82	15
16	345.44	NR	NR	370.78	370.38	370.20	370.11	369.01	364.86	360.89	356.25E	351.69	16
17	345.57	NR	NR	370.50	370.34	370.22	370.11	368.87	364.72	360.72	356.07E	351.58	17
18	345.60	NR	NR	370.81	370.30	370.21	370.11	368.74	364.60	360.60	355.96E	351.43	18
19	345.61	NR	NR	370.45	370.28	370.22E	370.11	368.62	364.50	360.43	355.78E	351.30	19
20	345.62	NR	NR	370.35	370.27	370.25E	370.09	364.49	364.38	360.29	355.65E	351.18	20
21	345.63	NR	NR	370.35	370.26	370.26E	370.09	368.37	364.25	360.13	355.45E	351.06	21
22	345.64	NR	NR	370.32	370.29	370.27E	370.09	368.23	364.12	359.98	355.28E	350.97	22
23	345.67	NR	NR	370.29	370.28	370.28E	370.08	368.11	364.02	359.81	355.15E	350.84	23
24	345.70	NR	NR	370.27	NR	370.28E	370.08	367.99	363.90	359.64	355.02E	350.71	24
25	345.70	NR	NR	370.34	NR	370.28E	370.08	367.89	363.80	359.48	354.86E	350.56	25
26	345.70	NR	NR	370.31	NR	370.27E	370.08	367.76	363.68	359.37	354.73E	350.43	26
27	345.69	NR	NR	370.31	NR	370.26E	370.09	367.62	363.57	359.25	354.57E	350.26	27
28	345.69	NR	NR	370.30	NR	370.23E	370.05	367.50	363.42	359.10	354.43E	350.12	28
29	345.67	NR	NR	370.32	NR	370.21E	370.04	367.36	363.28	358.92E	354.27E	349.97	29
30	345.67	NR	NR	370.40	NR	370.20E	370.03	367.23	363.11	358.75E	354.13E	349.84	30
31	345.67	NR	NR	370.37	NR	370.20E	NR	367.09	NR	358.60E	353.97E	NR	31

**MAXIMUM INSTANTANEOUS GAGE HEIGHTS**

E -- ESTIMATED  
NR -- NO RECORD  
NF -- NO FLOW

DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE	DATE	TIME	STAGE
1-18-73	0715	372.69									

LOCATION			MAXIMUM DISCHARGE			PERIOD OF RECORD		DATUM OF GAGE			
LATITUDE	LONGITUDE	1/4 SEC. T. & R. M.D.B.&M.	OF RECORD			DISCHARGE	GAGE HEIGHT ONLY	PERIOD		ZERO ON GAGE	REF. DATUM
			CFS	GAGE HT.	DATE			FROM	TO		
38 26 24	122 20 36	SE 19 7N 4W						MAY 1948-DATE	5-48	0.00	USCGS

Rector Reservoir is located on Rector Creek about 3 miles northeast of Yountville. Gaging station is located on the outlet tower of the reservoir. Elevation of reservoir floor is 250 feet. Spillway elevation is 370 feet.



TABLE B-3 (CONTINUED)

## DAILY TIDES

891110 SACRAMENTO RIVER AT COLLINSVILLE  
(OCTOBER 1, 1972, THROUGH MARCH 30, 1973)

DATE	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DATE
1	2.07 3.60	5.38 6.16	1.94 2.04	5.41	4.55 6.04	2.92 1.99	4.54 6.15	3.65 1.64	NR	NR	NR	NR	1
2	2.19 3.28	5.43 6.13	4.70 5.47	2.09 1.94	4.90 6.39	3.46 2.07	4.87 6.50	3.84 1.98	5.32 6.52	3.76	5.61 6.41	3.76 2.44	2
3	2.31 3.14	5.63	4.89 5.87	2.59 2.09	5.05 6.53	3.67 2.40	5.22 6.54	3.89 1.84	2.09 3.84	5.63 6.80	5.77 6.77	3.58 2.83	3
4	6.03 5.81	2.55 2.84	5.15 6.06	3.05 2.00	5.49 6.85	4.08 2.14	5.06 6.47	3.84 1.72	2.46 3.88	6.05 6.92	6.23 6.69	3.51 2.89	4
5	5.74 5.69	2.40 2.38	4.90 5.88	3.01 1.67	5.15 6.54	3.95 1.97	5.04 6.29	3.63 1.65	2.56 3.44	6.05	6.38 6.46	3.30 2.96	5
6	5.51 5.82	2.53 2.31	4.78 6.06	3.20 1.75	5.71 6.77	4.33 2.16	4.98 6.19	3.47 1.74	6.28 6.27	2.46 3.58	6.69 6.48	3.39 3.21	6
7	5.54 6.26	2.92 2.59	4.94 6.39	3.64 1.86	5.41 6.85	4.33 2.21	5.21 5.93	3.41 1.68	6.40 6.78	3.28	6.76 6.02	3.01 3.44	7
8	5.56 6.22	3.26 2.37	4.79 5.85	3.54 1.48	5.33 6.36	4.17 1.74	5.17 5.73	3.19	NR	NR	6.95 5.74	2.84 3.78	8
9	5.37 6.36	3.37 2.39	4.63 5.81	3.64	4.96 5.84	3.85	NR	NR	5.30 6.65	3.36 2.97	6.98 5.30	2.77	9
10	5.29 6.27	3.65 2.31	1.61 4.03	4.98 5.92	1.55 3.75	4.91 5.47	NR	NR	5.31 7.27	4.38 3.29	3.84 2.61	6.62 5.38	10
11	5.13 6.15	3.85	2.03 4.35	5.38 5.80	1.57 3.70	5.20 5.29	NR	NR	5.53 7.62	4.81	4.32 2.45	6.72 5.15	11
12	2.17 4.11	4.94 6.12	1.73 3.89	4.93 5.15	1.65 3.25	5.23 4.61	NR	NR	3.58 4.91	5.81 7.41	4.36 2.22	6.38 5.20	12
13	2.06 4.22	4.81 6.09	1.57 4.38	5.18 5.57	1.53 2.83	5.37 4.33	NR	NR	3.22 5.00	6.09 7.36	4.36 1.84	6.20 4.96	13
14	2.15 4.37	4.96 5.80	2.27 3.84	5.81 5.30	1.89 1.85	5.33 3.80	NR	NR	2.91 4.61	5.99 7.60	3.44 1.52	5.80	14
15	2.34 4.63	5.33 5.81	2.21 3.34	5.86 5.54	2.05 1.67	5.60 3.99	NR	NR	3.00 4.17	6.06 7.29	5.14 5.94	3.18 1.65	15
16	2.04 3.88	5.19 5.39	2.71 3.00	6.29 5.36	2.55 1.50	6.00	NR	NR	2.73 3.85	6.11 7.08	5.35 6.02	2.82 1.94	16
17	1.90 3.27	5.28 5.47	2.95 2.76	6.66	4.36 6.71	3.15 1.76	NR	NR	2.67 3.57	6.18 6.82	5.79 6.03	2.70 2.22	17
18	2.11 2.92	5.53 5.60	5.50 5.86	3.17 2.46	4.77 6.86	3.35 1.76	NR	NR	2.62 3.34	6.20 6.58	5.90 5.79	2.38 2.27	18
19	2.49 2.78	5.90	5.39 7.00	3.35 2.10	5.16 7.11	3.58 1.75	NR	NR	2.74 3.17	6.37 6.14	6.02 5.90	2.29 2.92	19
20	5.71 6.09	2.69 2.51	5.32 6.96	3.38 1.84	5.15 7.04	3.52 1.70	NR	NR	2.85 3.13	6.37	6.56 5.81	2.56 2.88	20
21	5.53 6.12	2.68 2.00	5.26 6.99	3.54 1.71	5.25 7.04	3.59 1.98	NR	NR	5.83 6.47	3.14 3.13	6.26 5.51	2.35 3.12	21
22	5.21 6.31	2.75 1.81	5.32 7.05	3.70 1.80	5.82 6.99	3.86	NR	NR	5.63 6.49	3.61 2.98	6.05 4.86	1.84 3.22	22
23	5.14 6.49	2.94 1.73	5.42 6.93	3.73	2.00 3.47	5.61 6.42	NR	NR	5.06 6.23	3.73 2.90	5.80 4.64	1.85 3.58	23
24	5.14 6.69	3.26 1.84	1.84 3.66	5.39 6.40	1.94 3.16	5.62 5.60	NR	NR	5.04 6.86	4.60 3.55	5.62 4.48	1.86 3.85	24
25	5.15 6.68	3.50	1.61 3.31	5.24 5.70	1.60 2.89	5.42 5.05	NR	NR	5.00 6.19	4.52 2.79	5.54 4.55	2.03	25
26	1.91 3.86	5.27 6.75	1.42 3.21	5.21 5.39	1.72 2.69	5.51 4.65	NR	NR	NR	NR	4.16 2.07	5.42 4.68	26
27	2.05 3.93	5.33 6.35	1.67 3.09	5.60 5.09	2.31 2.88	6.06 4.81	NR	NR	NR	NR	4.20 1.84	5.19 4.63	27
28	1.90 3.71	5.28 5.99	2.00 2.72	5.72 4.75	3.07 2.32	6.17 4.24	NR	NR	NR	NR	3.65 1.29	4.78	28
29	1.74 3.05	5.06 5.01	2.22 2.14	5.58 4.49	3.09 1.99	6.03	NR	NR			4.30 4.53	2.95 1.26	29
30	1.17 2.43	4.74 4.80	2.55 1.98	5.81	4.31 5.96	3.39 1.68	NR	NR			4.53 4.87	2.64 1.40	30
31	1.62 2.34	5.21 4.81			4.41 6.06	3.53 1.47	NR	NR			4.93 4.99	2.23 1.63	31
MAXIMUM	6.75		7.05		7.11		NR		NR		NR		MAXIMUM
MINIMUM	1.17		1.42		1.47		NR		NR		NR		MINIMUM

NR - NO RECORD

LOCATION: LAT. 38 04 25, LONG. 121 51 18, SW SEC. 27, T3N, R1E, M08&M  
0.4 MILE SOUTHWEST OF COLLINSVILLE, 3.3 MILES NORTHEAST OF PITTSBURG.

PERIOD OF RECORD: 1929 TO DATE

TABLE 8-3 (CONTINUED)

DAILY TIDES

891110 SACRAMENTO RIVER AT COLLINSVILLE  
(APRIL 1, 1973, THROUGH SEPTEMBER 30, 1973)

DATE	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DATE
1	5.13	1.87	6.09	1.52	7.18	1.76	6.76	1.44	5.93	1.95	2.30	4.98	1
	4.84	1.34	4.87	2.44	5.33	3.71	5.03	3.08	5.59	2.70	2.56	5.87	
2	4.93	1.19	6.16	1.28	7.15	1.71	6.55	1.51	5.50	2.02	2.20	4.70	2
	4.51	1.39	4.78	2.65	5.30	3.58	5.07	2.87	5.72		2.86	5.76	
3	5.25	0.99	6.31	1.11	6.94	1.66	6.02	1.36	2.63	5.19	2.08	4.45	3
	4.44	1.58	4.88	3.08	5.35	3.49	5.10	2.71	2.23	5.76	3.22	5.73	
4	5.55	0.98	6.63	1.38	6.58	1.59	5.55	1.27	2.43	4.81	2.13	4.63	4
	4.62	2.12	5.17	3.34	5.36	3.39	5.18		2.52	5.97	3.97	6.24	
5	5.97	1.14	6.60	1.22	6.20	1.48	2.51	5.11	2.46	4.64	2.27	4.72	5
	4.84	2.75	5.00	3.34	5.29		1.63	5.54	3.07	6.12	3.84	5.76	
6	6.34	1.37	6.40	0.99	3.02	5.45	2.59	4.75	2.35	4.54	1.76	4.45	6
	4.81	3.04	4.78	3.11	1.27	5.35	1.87	5.66	3.59	6.17	3.53	5.53	
7	6.25	1.10	5.99	1.08	2.74	4.86	2.25	4.25	2.21	4.59	1.54	4.51	7
	4.57	3.14	5.00		1.37	5.49	2.13	5.70	3.81	6.19	3.24	5.46	
8	5.90	0.96	3.12	5.55	2.41	4.53	1.97	4.03	2.10	4.72	1.40	4.64	8
	4.52		0.88	4.88	1.79	5.78	2.62	5.83	3.95	6.12	2.99	5.55	
9	3.38	5.71	2.75	5.00	2.21	4.41	1.79	4.10	1.90	4.70	1.53	4.92	9
	1.01	4.70	0.93	4.99	2.50	6.05	3.14	6.05	3.72	6.13	3.17		
10	3.37	5.45	2.41	4.60	2.11	4.56	1.87	4.47	1.72	4.71	5.87	2.07	10
	1.09	4.98	1.09	5.24	3.07	6.32	3.58	6.23	3.53		5.16	2.79	
11	3.15	5.37	2.16	4.62	2.08	4.75	1.82	4.69	6.12	1.77	5.65	1.92	11
	1.28	5.13	1.61	5.64	3.41	6.35	3.83	6.40	4.87	3.53	5.13	2.48	
12	2.69	5.27	2.12	4.78	1.76	4.71	1.81	4.90	6.21	1.82	5.55	1.98	12
	1.53		2.17	5.85	3.46		3.90		4.92	3.23	5.30	2.33	
13	5.40	2.39	2.05	4.95	6.32	1.67	6.51	2.02	6.07	1.77	5.40	2.17	13
	5.23	1.71	2.55		4.78	3.70	5.11	4.15	4.88	2.88	5.52	2.24	
14	5.43	1.86	6.05	1.89	6.31	1.58	6.65	2.10	5.94	1.82	5.20	2.24	14
	4.94	1.75	5.01	2.96	4.65	3.49	5.16	3.90	5.01	2.77	5.63	2.00	
15	5.51	1.66	6.14	1.64	6.03	1.22	6.53	1.89	5.78	1.97	4.98	2.43	15
	4.94	1.97	4.78	2.99	4.63	3.69	5.04	3.72	5.16	2.71	5.82	1.96	
16	5.61	1.46	6.03	1.42	6.24	1.39	6.36	1.84	5.55	1.95	4.84	2.71	16
	4.85	2.21	4.69	3.10	4.73	3.69	5.09	3.52	5.31	2.53	5.98		
17	5.75	1.42	6.05	1.41	6.16	1.27	6.14	1.83	5.26	2.09	1.90	4.64	17
	4.88	2.78	4.71	3.38	4.57	3.36	5.11	3.35	5.51	2.44	2.89	6.00	
18	5.66	1.07	6.19	1.48	5.66	1.01	5.92	1.82	5.02	2.31	1.76	4.50	18
	4.57	2.88	4.98	3.89	4.49	3.26	5.16	3.11	5.65		3.24	6.06	
19	5.77	0.97	6.42	1.65	5.52	1.10	5.54	1.78	2.26	4.67	1.69	4.56	19
	4.44	2.87	5.04	3.83	4.70	3.30	5.20	2.89	2.51	5.77	3.58	6.06	
20	5.41	0.83	6.13	1.39	5.35	1.16	5.16	1.88	1.99	4.31	1.59	4.60	20
	4.21	3.08	4.81	3.72	4.81	3.16	5.40		2.77	5.93	3.33	5.87	
21	5.42	0.85	5.82	1.39	5.11	1.36	2.71	4.64	1.88	4.24	1.40	4.66	21
	4.27	3.32	4.96	3.87	5.14		1.90	5.52	3.31	6.09	2.98	5.81	
22	5.35	0.97	5.63	1.36	3.30	4.88	2.34	4.24	1.68	4.24	1.51	4.95	22
	4.49	3.77	4.94		1.66	5.28	2.21	5.82	3.39	6.20	2.88	5.81	
23	5.38	1.17	3.73	5.17	2.70	4.28	2.10	4.04	1.52	4.48	1.59	5.06	23
	4.59		1.34	5.04	1.72	5.41	2.69	5.94	3.53	6.24	2.55		
24	3.95	5.13	3.41	4.69	2.21	4.04	1.72	3.95	1.44	4.56	5.68	1.82	24
	1.20	4.65	1.32	5.12	2.17	5.77	2.95	6.06	3.19	6.30	5.38	2.35	
25	3.83	4.85	3.10	4.50	1.89	4.02	1.43	4.14	1.55	4.81	5.52	1.74	25
	1.31	4.86	1.70	5.46	2.54	6.09	3.29	6.42	2.93		5.32	1.87	
26	3.54	4.69	2.64	4.23	1.64	4.21	1.52	4.57	6.25	1.62	5.24	1.82	26
	1.43	5.14	1.77	5.51	3.04	6.42	3.69	6.97	5.13	2.92	5.34	1.65	
27	3.09	4.87	2.04	4.13	1.62	4.51	1.94	5.07	6.28	1.79	5.05	2.04	27
	1.75	5.51	1.92	5.62	3.42	6.83	3.71		5.17	2.47	5.53	1.64	
28	2.68	4.99	1.55	4.20	1.80	4.99	6.97	1.97	5.90	1.69	5.00	2.39	28
	2.06	5.75	2.31	6.03	3.77		5.16	3.43	5.29	2.29	5.75	1.73	
29	2.15	4.87	1.55	4.60	7.06	1.69	6.85	1.90	5.72	1.90	4.97	2.77	29
	2.14		2.93	6.58	5.01	3.57	5.19	3.10	5.59	2.45	5.86	1.87	
30	5.98	1.85	1.83	5.21	6.97	1.57	6.54	1.82	5.66	2.43	4.96	3.20	30
	5.02	2.32	3.75		5.04	3.32	5.25	2.82	5.91	2.46	6.03		
31			7.19	1.94			6.30	1.82	5.35	2.51			31
			5.34	3.78			5.41	2.71	5.95				
MAXIMUM	6.34		7.19		7.18		6.97		6.30		6.24		MAXIMUM
MINIMUM	0.83		0.88		1.01		1.27		1.44		1.40		MINIMUM

MAXIMUM GAGE HEIGHT OF RECORD; 9.2 - 4/6/58

ZERO OF GAGE: 1929 -3.05 USCGS  
1964 -3.54 USCGS  
1964 TO DATE -3.00 USCGS



TABLE B-3 (CONTINUED)

## DAILY TIDES

E03300 SUISIN RAY AT BENICIA  
(OCTOBER 1, 1972, THROUGH MARCH 30, 1973)

DATE	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH		DATE
1	-1.84 0.19	2.58 3.32	-1.72 -1.63	2.85 1.99	-0.23 -1.80	3.42 2.18	1.76 3.45	0.55 -2.40	2.33 3.64	0.52 -2.72	0.77 -2.11	3.54	1
2	-1.64 -0.15	2.73 3.38	-1.44 -1.80	2.94 2.23	0.27 -1.83	3.74	2.13 3.77	0.70 -2.12	2.53 3.79	0.32 -2.59	2.66 3.51	-0.01 -2.28	2
3	-1.50 -0.46	2.93 3.25	-0.82 -1.67	3.35	2.34 3.91	0.47 -1.47	2.41 3.75	0.67 -2.25	2.87 4.08	0.33 -2.15	2.84 3.90	-0.34 -1.93	3
4	-1.32 -0.83	3.17 3.05	2.46 3.45	-0.31 -1.91	2.72 4.14	0.85 -1.86	2.30 3.76	0.69 -2.44	3.33 4.16	0.24 -1.97	3.31 3.80	-0.71 -1.83	4
5	-1.33 -1.31	3.12	2.14 3.27	-0.36 -2.23	2.37 3.91	0.76 -2.05	2.33 3.61	0.44 -2.46	3.31 3.52	-0.45 -1.93	3.51 3.60	-1.06 -1.62	5
6	2.87 3.32	-1.10 -1.42	2.11 3.38	0.00 -2.15	3.10 4.09	1.24 -1.84	2.30 3.48	0.25 -2.32	3.61 3.68	-0.29 -0.70	3.91 3.62	-0.90 -1.20	6
7	2.93 3.70	-0.58 -1.18	2.24 3.65	0.48 -2.06	2.71 4.09	1.17 -1.83	2.52 3.20	0.14 -2.34	4.04 2.99	-0.61 -0.83	3.94 3.10	-1.60 -0.61	7
8	2.85 3.64	-0.17 -1.43	2.04 3.12	0.40 -2.43	2.59 3.67	1.03 -2.27	2.57 3.16	-0.06 -1.71	3.72 2.40	-0.99 -0.29	4.18 2.78	-1.79 -0.05	8
9	2.70 3.76	0.13 -1.34	1.91 3.06	0.52 -2.22	2.26 3.19	0.74 -2.36	3.42 3.31	0.87 -1.35	3.74 2.37	-1.14 1.04	4.09 2.36	-1.92 0.27	9
10	2.63 3.57	0.44 -1.44	2.36 3.19	0.91 -1.69	2.31 2.84	0.71 -2.27	3.31 2.12	-0.38 -1.37	4.30 2.58	1.00	3.72 2.43	-1.94 0.95	10
11	2.47 3.42	0.72 -1.52	2.50 2.84	1.08 -1.97	2.54 2.59	0.54 -2.06	3.40 1.90	-0.61 -0.47	1.58 -1.05	4.62 2.79	3.76 2.15	-1.95	11
12	2.25 3.34	1.02 -1.59	2.18 2.44	0.85	2.64 1.95	0.12 -2.02	3.67 1.56	-1.26	1.49 -1.62	4.44 3.09	1.09 -2.11	3.47 2.23	12
13	2.04 3.32	1.18	-2.06 1.43	2.62 3.06	2.73 1.63	-0.47	-0.01 -1.89	3.68 1.64	1.46 -2.33	4.41 2.96	0.94 -2.72	3.29 2.03	13
14	-1.39 1.34	2.26 3.08	-1.03 0.62	3.12 2.57	-1.47 -1.54	2.81 1.13	0.52 -2.30	3.85 2.27	0.88 -2.41	4.72	0.01 -3.12	3.00 2.36	14
15	-1.10 1.52	2.55 3.08	-1.30 0.01	3.24 2.69	-1.10 -1.94	3.07 1.30	1.15 -1.77	4.68 3.39	3.03 4.35	0.14 -2.64	-0.50 -2.96	3.15 2.60	15
16	-1.39 0.81	2.48 2.72	-0.91 -0.67	3.66 2.52	-0.57 -2.32	3.52 1.68	2.24 -1.31	5.81	3.15 4.22	-0.33 -2.55	-1.10 -2.55	3.24	16
17	-1.64 0.07	2.65 2.63	-0.71 -1.21	3.99 2.68	0.00 -2.27	4.20	3.69 5.34	1.23 -1.70	3.28 3.99	-0.74 -2.46	3.12 3.25	-1.44 -2.29	17
18	-1.59 -0.50	2.92 2.85	-0.51 -1.72	4.25	2.11 4.32	0.18 -2.45	4.28 5.89	2.19 -1.53	3.37 3.77	-0.99 -2.03	3.23 3.13	-1.84 -1.93	18
19	-1.29 -0.88	3.27 2.99	2.60 4.37	-0.24 -2.21	2.45 4.51	0.33 -2.70	3.83 4.97	0.45 -2.22	3.57 3.31	-1.16 -1.53	3.42 3.34	-1.89 -0.84	19
20	-0.99 -1.29	3.52	2.59 4.40	-0.10 -2.60	2.42 4.43	0.21 -2.87	3.42 4.33	-0.03 -2.12	3.60 2.98	-1.11 -0.84	3.86 3.00	-1.75 -1.12	20
21	2.85 3.63	-0.99 -1.94	2.57 4.41	0.20 -2.78	2.50 4.39	0.23 -2.52	3.80 3.85	-0.29 -1.92	3.64 2.74	-0.98 -0.03	3.61 2.67	-1.85 -0.70	21
22	2.57 3.88	-0.83 -2.25	2.60 4.46	0.38 -2.62	3.09 4.31	0.35 -2.48	3.58 3.00	-0.46 -1.71	3.57 2.14	-1.06 0.35	3.28 2.02	-2.47 -0.22	22
23	2.52 4.06	-0.50 -2.39	2.75 4.36	0.43 -2.48	2.89 3.72	-0.10 -2.36	3.28 2.29	-0.75 -1.10	3.34 2.17	-0.93 1.46	2.99 1.80	-2.32 0.35	23
24	2.52 4.24	-0.10 -2.30	2.78 3.76	0.40 -2.59	2.92 2.87	-0.52 -2.54	3.29 1.95	-0.53 -0.29	4.02 2.16	-0.17	2.76 1.56	-2.10 0.65	24
25	2.53 4.13	0.26 -2.22	2.59 2.97	0.01 -2.65	2.78 2.30	-0.72 -2.17	3.35 1.59	-0.65	1.37 -0.79	3.28 1.88	2.63 1.57	-1.76 1.00	25
26	2.58 4.07	0.56 -1.96	2.62 2.69	-0.05	2.88 1.89	-0.87 -1.21	0.02 -1.09	2.99 1.16	1.44 -0.80	3.32 2.20	2.52 1.69	-1.59	26
27	2.63 3.59	0.68	-2.21 -0.28	3.00 2.35	3.38 1.97	-0.64	0.31 -1.63	2.77 1.14	1.41 -0.93	3.55 2.72	1.09 -1.87	2.32 1.53	27
28	-2.04 0.44	2.58 3.09	-1.67 -0.81	3.16 1.99	-0.26 -1.44	3.29 1.36	0.60 -1.72	2.88 1.89	1.54 -1.61	3.74 2.70	0.45 -2.53	1.78 1.37	28
29	-2.15 -0.21	2.33 2.17	-1.22 -1.40	3.06 1.71	-0.13 -1.87	3.20 1.47	1.37 -1.57	3.82			-0.23 -2.66	1.71 1.69	29
30	-2.66 -0.86	2.15 2.02	-0.70 -1.73	3.21 1.84	0.27 -2.26	3.19 1.60	2.50 3.78	1.48 -2.12			-0.77 -2.55	2.11 2.16	30
31	-2.14 -1.14	2.66 2.05			0.39 -2.54	3.27	2.55 3.68	1.13 -2.70			-1.46 -2.59	2.13 2.30	31
MAXIMUM	4.24		4.46		4.51		5.89		4.72		4.18		MAXIMUM
MINIMUM	-2.66		-2.78		-2.87		-2.70		-2.72		-3.12		MINIMUM

LOCATION: LAT. 38 02 27, LONG. 122 08 04, SW SEC. 6, T2N, R2W  
ON CHANNEL SIDE OF WHARF IMMEDIATELY SOUTHEAST OF BENICIA.PERIOD OF RECORD: 1929 TO DATE  
INTERMITTENT 1929 TO 1940



TABLE B-3 (CONTINUED)

## DAILY TIDES

E03300 SUISIN BAY AT BENICIA  
(APRIL 1, 1973, THROUGH SEPTEMBER 30, 1973)

DATE	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		DATE
1	-2.21 -2.87	2.04	-2.52 -1.15	2.17	NR	NR	4.12 2.30	-2.93 -0.31	3.08 2.84	-2.21 -1.05	2.18 3.23	-0.89 -1.50	1
2	2.26 1.89	-3.02 -2.65	3.47 2.02	-3.08 -0.80	NR	NR	3.90 2.33	-2.82 -0.58	2.59 3.05	-1.90 -1.03	1.77 3.00	-0.54	2
3	2.66 1.85	-3.33 -2.29	NR	NR	NR	NR	3.32 2.42	-2.81 -0.79	2.25 3.07	-1.52 -1.20	-1.71 0.01	1.50 2.87	3
4	2.99 1.98	-3.43 -1.54	NR	NR	NR	NR	2.77 2.53	-2.63 -0.96	1.82 3.23	-1.04	-1.68 0.62	1.58 3.16	4
5	3.39 2.16	-3.30 -0.81	NR	NR	NR	NR	2.27 2.82	-2.15	-1.22 -0.39	1.58 3.27	-1.47 0.57	1.72 2.72	5
6	3.63 2.05	-3.21 -0.38	NR	NR	2.63 2.68	-2.70	-0.98 -1.78	1.82 2.86	-1.33 0.29	1.48 3.26	-1.89 0.36	1.57 2.64	6
7	3.55 1.84	-3.31 -0.11	NR	NR	-0.70 -2.40	2.02 2.87	-1.26 -1.23	1.33 2.95	-1.53 0.52	1.58 3.19	-2.28 0.04	1.69 2.57	7
8	3.19 1.81	-3.39 0.19	NR	NR	-1.09 -1.66	1.70 3.14	-1.55 -0.61	1.06 3.03	-1.76 0.63	1.69 3.16	-2.33 -0.16	1.96 2.84	8
9	2.95 2.00	-3.20	NR	NR	-1.38 -0.81	1.51 3.30	-1.86 -0.02	1.22 3.19	-1.96 0.42	1.74 3.20	-2.25 -0.15	2.25 2.95	9
10	0.18 -3.01	2.72 2.29	NR	NR	-1.51 -0.27	1.66 3.41	-1.94 0.37	1.53 3.36	-2.14 0.28	1.87 3.23	-1.93 -0.83	2.30 2.79	10
11	-0.15 -2.84	2.56 2.46	NR	NR	-1.70 0.08	1.84 3.50	-2.01 0.54	1.77 3.49	-2.09 0.19	2.03 3.31	-2.01 -1.22	2.33	11
12	-0.89 -2.63	2.40 2.78	NR	NR	-2.13 0.12	1.83 3.48	-2.04 0.64	2.00 3.57	-2.14 -0.08	2.09 3.21	2.73 2.60	-1.90 -1.45	12
13	-1.28 -2.26	2.49 2.81	NR	NR	-2.30 0.34	1.95 3.47	-2.13 0.75	2.15 3.65	-2.26 -0.45	2.13	2.59 2.79	-1.78 -1.65	13
14	-2.08 -2.12	2.26 2.86	NR	NR	-2.52 0.22	1.82	-2.02 0.41	2.19	3.09 2.29	-2.16 -0.65	2.43 2.99	-1.54 -1.90	14
15	-2.43 -1.87	2.24	NR	NR	3.22 1.84	-2.84 0.34	3.56 2.09	-2.19 0.24	2.93 2.42	-2.07 -0.86	2.21 3.15	-1.20 -1.97	15
16	2.94 2.14	-2.66 -1.55	NR	NR	3.33 1.92	-2.72 0.35	3.47 2.19	-2.19 0.04	2.73 2.61	-1.88 -1.01	2.00 3.30	-0.85 -2.05	16
17	3.09 2.04	-2.83 -0.98	NR	NR	3.30 1.76	-2.73 0.08	3.25 2.22	-2.17 -0.17	2.45 2.85	-1.59 -1.13	1.83 3.24	-0.46 -2.10	17
18	2.85 1.76	-3.23 -0.69	NR	NR	2.85 1.77	-2.97 0.08	2.95 2.28	-2.13 -0.45	2.16 2.98	-1.36 -1.30	1.66 3.21	-0.04	18
19	2.95 1.64	-3.29 -0.42	NR	NR	2.66 1.99	-2.80 0.09	2.56 2.35	-2.04 -0.64	1.77 3.11	-0.93	-2.25 0.32	1.72 3.21	19
20	2.68 1.50	-3.51 -0.07	NR	NR	2.50 2.13	-2.59 -0.02	2.18 2.56	-1.90 -0.82	-1.61 -0.55	1.35 3.15	-2.22 0.07	1.82 3.00	20
21	2.65 1.48	-3.21 0.16	NR	NR	2.29 2.45	-2.28 -0.04	1.72 2.83	-1.61	-1.81 0.07	1.36 3.24	-2.56 -0.28	1.90 2.99	21
22	2.55 1.64	-2.91 0.61	NR	NR	1.89 2.49	-2.08	-1.09 -1.17	1.30 3.07	-2.08 0.17	1.38 3.31	-2.46 -0.52	2.24 3.13	22
23	2.50 1.73	-2.56 0.79	NR	NR	-0.73 -1.71	1.36 2.67	-1.54 -0.61	1.08 3.14	-2.35 0.20	1.54 3.41	-2.36 -1.09	2.38 2.99	23
24	2.24 1.81	-2.35	NR	NR	-1.20 -1.09	1.12 3.01	-1.96 -0.27	1.05 3.26	-2.59 -0.19	1.78 3.55	-2.15 -1.41	2.69 2.83	24
25	0.65 -2.15	2.02 2.06	NR	NR	-1.68 -0.69	1.09 3.42	-2.38 0.08	1.33 3.67	-2.55 -0.46	2.10 3.64	-2.20 -1.95	2.75	25
26	0.27 2.00	1.83 2.32	NR	NR	-2.09 -0.17	1.35 3.70	-2.41 0.44	1.82 4.14	-2.50 -0.63	2.41 3.55	2.66 2.85	-1.98 -2.26	26
27	-0.37 -1.85	1.84 2.71	NR	NR	-2.29 0.23	1.70 4.07	-2.33 0.32	2.17 4.14	-2.36 -1.20	2.45	2.46 3.02	-1.68 -2.26	27
28	-0.82 -1.52	2.10 2.98	NR	NR	-2.38 0.44	2.12 4.29	-2.48 -0.09	2.27 4.07	3.24 2.71	-2.34 -1.39	2.38 3.21	-1.13 -2.17	28
29	-1.41 -1.42	2.07 3.31	NR	NR	-2.62 0.18	2.20 4.26	-2.59 -0.42	2.40	3.08 3.03	2.00 -1.33	2.24 3.25	-0.67 -2.05	29
30	-1.98 -1.25	2.25 3.47	NR	NR	-2.80 -0.07	2.28	3.79 2.50	-2.60 -0.73	2.83 3.20	-1.55 -1.36	2.07 3.27	-0.25 -1.87	30
31			NR	NR			3.51 2.73	-2.39 -0.85	2.54 3.30	-1.14 -1.42			31
MAXIMUM	3.63		NR		NR		4.14		3.64		3.30		MAXIMUM
MINIMUM	-3.51		NR		NR		-2.93		-2.59		-2.56		MINIMUM

NR - NO RECORD

MAXIMUM GAGE HEIGHT OF RECORD : 5.7 - 4/6/58

ZERO OF GAGE : 1929 TO 1940 -2.21 USCGS  
1940 TO 1942 -5.00 USCGS  
1942 TO DATE 0.00 USCGS

TABLE B-4

## CORRECTIONS AND REVISIONS TO PREVIOUSLY PUBLISHED REPORTS OF SURFACE WATER DATA

Location of Error or Revision				Change or Revision		
Report	Page	Mile & Bank	Name	Item	From	To
Bulletin No. 23-62	394		Suisun Bay at Benicia Arsenal	<u>1962</u> Daily Maximum and Minimum Tides for the period 3-1-62 to 3-28-62, inclusive	Published values	2.00 feet lower than published values
				Maximum for March 1962	16.72	14.72
Bulletin No. 130-63	B-7		Suisun Bay at Benicia Arsenal	<u>1963</u> Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
Bulletin No. 130-64	48		Suisun Bay at Benicia Arsenal	<u>1964</u> Maximum Gage Height of Record	6.72	5.7
				Date of Maximum Gage Height of Record	3-5-62	4-6-58
Bulletin No. 130-64	52		City of Vallejo from Cache Slough	Total acre-feet	Published values	Values published in Bulletin No. 130-66 Table B-2
				Average cubic feet per second	Published values	Values published in Bulletin No. 130-66 Table B-2
				Monthly quantities in percent of seasonal	Published values	Values published in Bulletin No. 130-66 Table B-2
Bulletin No. 130-67	44		Sacramento River at Collinsville	<u>1967</u> Daily Maximum and Minimum Tides		<u>Notation:</u> In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.
Bulletin No. 130-67	45		Suisun Bay at Benicia Arsenal	Daily Maximum and Minimum Tides		<u>Notation:</u> In order to machine process the data it was necessary to avoid negative gage heights. Subtract 10.00 feet to obtain gage heights.



Appendix C

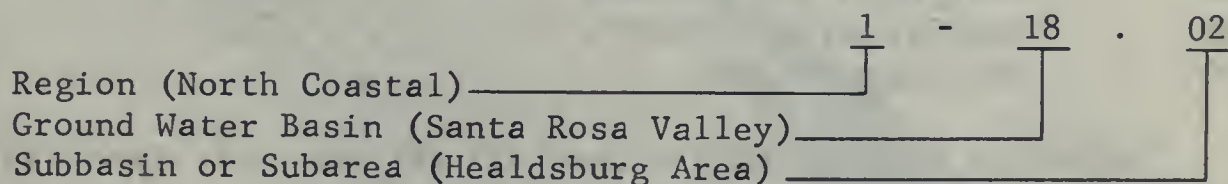
GROUND WATER MEASUREMENTS

This appendix contains summary and selected information concerning the level of ground water within 32 ground water basins or areas in the Central Coastal Area. Wells are selected to reflect the ground water conditions of the area. These wells are continuously reviewed and, when conditions dictate, replacement wells are located and measured.

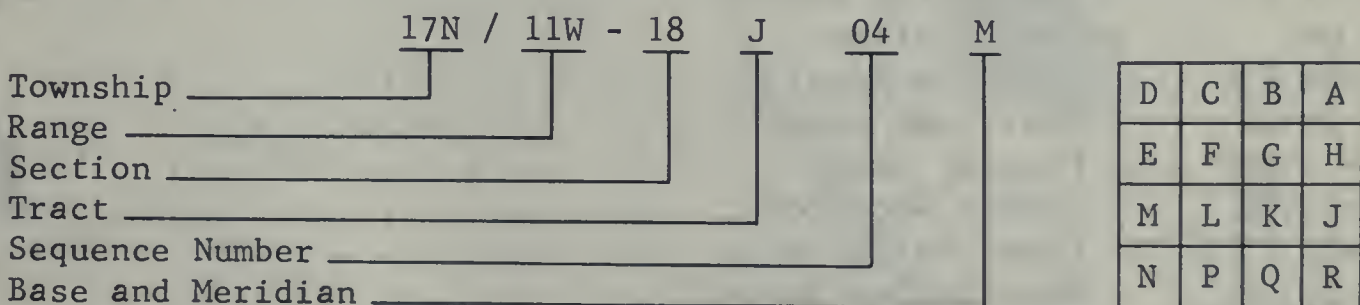
Earlier editions of this report contained a tabulation of individual measurements of ground water levels at wells. This type of data collected by the Department will be available at the various district offices of the Department. Please see the introduction at the front of this volume for the addresses of these district offices.

Table C-1 shows the average change in ground water levels for the various basins in the Central Coastal Area from spring 1972 to spring 1973. This table also shows the number of well measurements collected in the various areas. Figure C-2 contains graphical presentations of the average levels of ground water in the spring for the past several years. Figure C-3 is a graphical representation of the fluctuation of ground water level in certain selected wells for the past several years. An attempt has been made to select wells that represent conditions in the basin where the well is located. However, some caution in the use of these data is in order because ground water conditions can vary markedly with relatively small changes in horizontal location.

Two numbering systems are used by the Department to facilitate processing of water level measurement data. The two systems are the Region and Basin Designation and the State Well Numbering System. The regions used in Bulletin No. 130 are geographic areas defined in Section 13200 of the Water Code. This volume comprises the southern portion of North Coastal Region No. 1, the northern portion of Central Coastal Region No. 3, and all of San Francisco Bay Region No. 2. A decimal system of the form 0-00.00 has been selected according to geographic regions, ground water basins, and subbasins or subareas as follows:



The State Well Numbering System is based on township, range, and section subdivisions of the public land survey. The number of a well, assigned in accordance with this system, is referred to as the State Well Number, as illustrated below on the left.

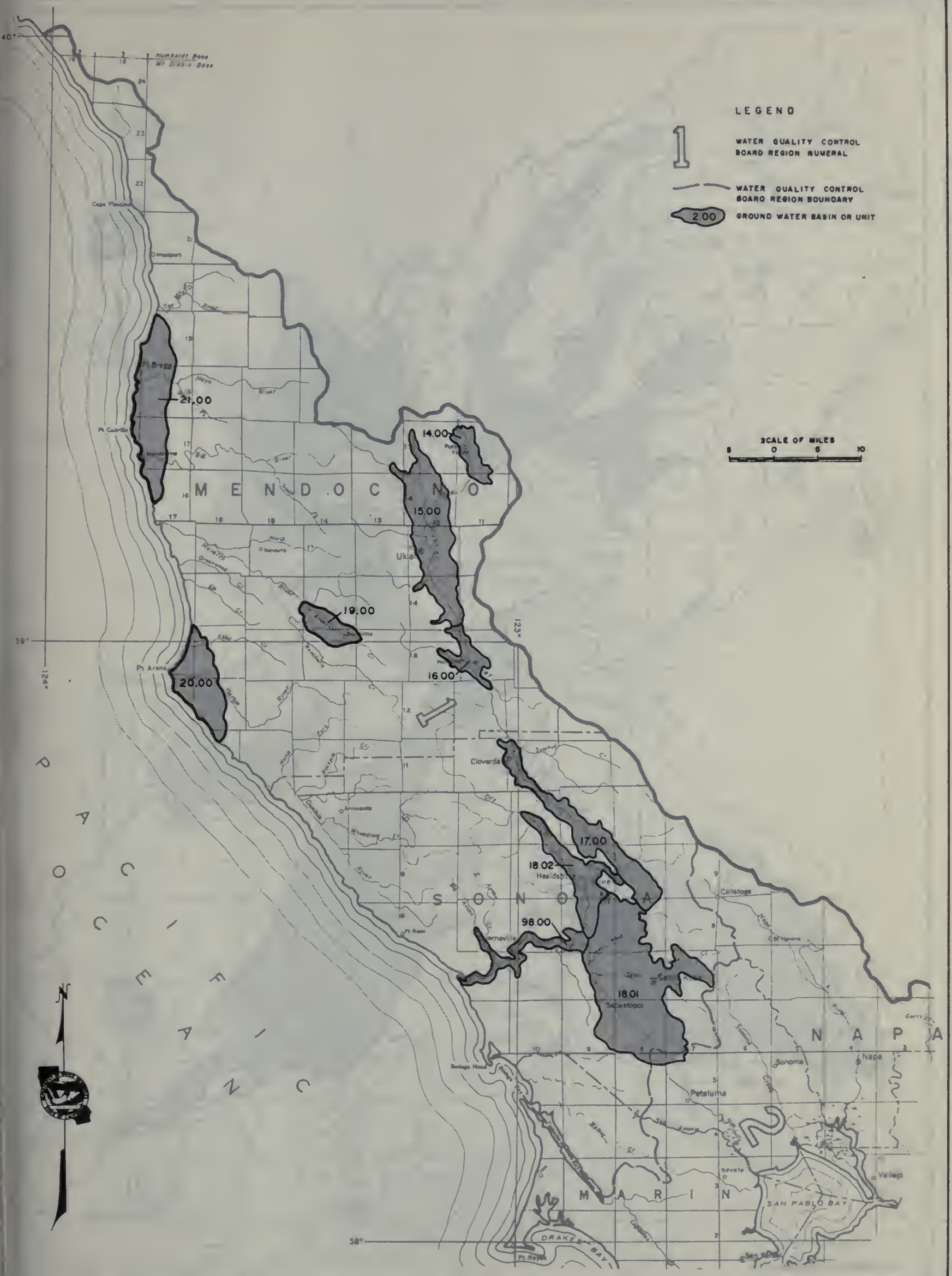


This number identifies and locates the well. In the example, the well is in Township 17 North, Range 11 West, Tract J of Section 18, located in the Mount Diablo Base and Meridian. A section is divided into 40-acre tracts as shown above on the right. Sequence numbers in a tract are generally assigned in chronological order. The example designates the fourth well to be assigned a number in Tract J.



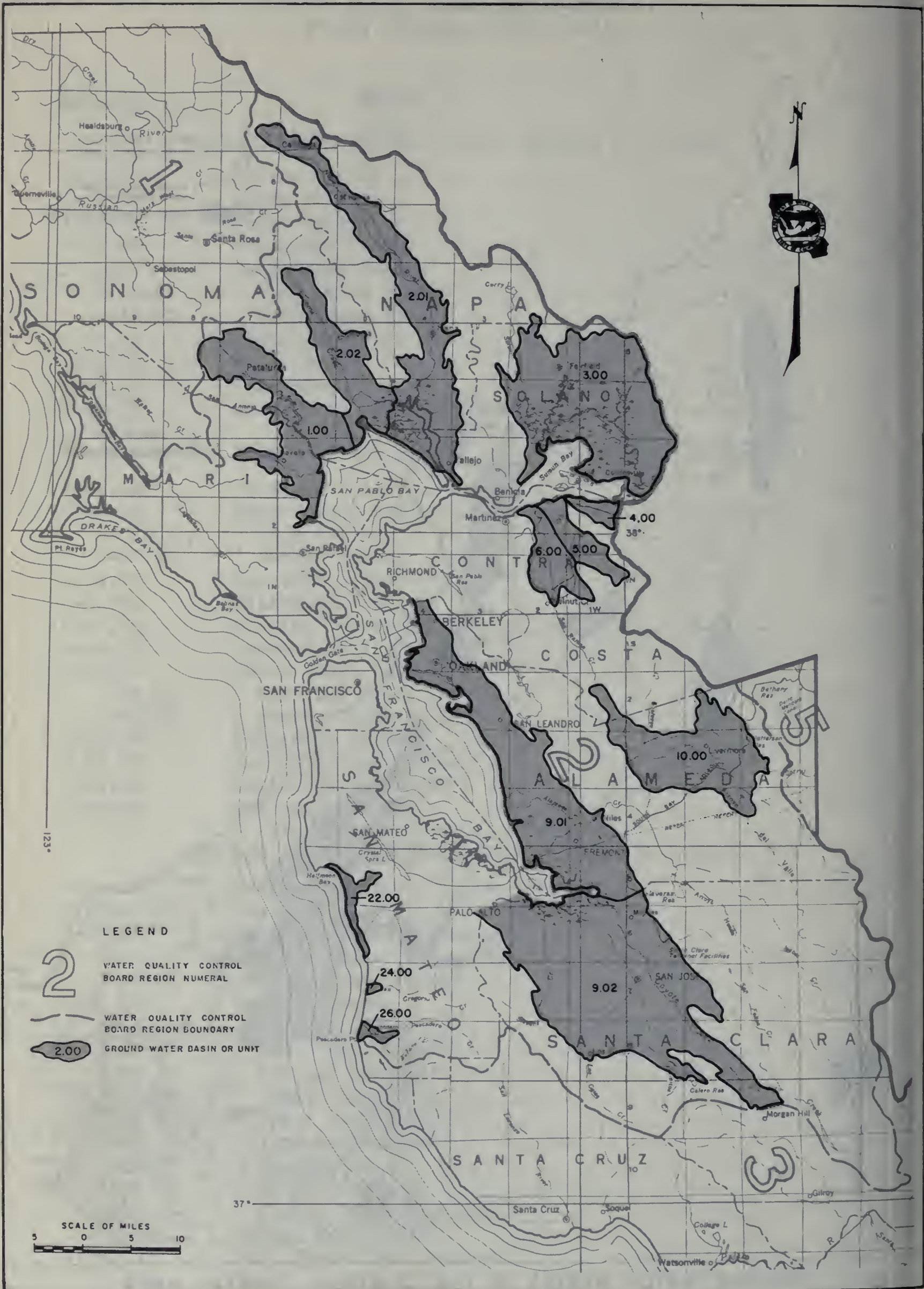
INDEX TO GROUND WATER MEASUREMENT DATA  
IN THE CENTRAL COASTAL AREA

<u>Number</u>	<u>Basin</u>	<u>Page</u>
NORTH COASTAL REGION 1-00.00 (Figure C-1, Sheet 1)		
1-14.00	Potter Valley . . . . .	24, 25
1-15.00	Ukiah Valley . . . . .	24, 25, 29
1-16.00	Sanel Valley . . . . .	24, 25, 29
1-17.00	Alexander Valley . . . . .	24, 25, 29
1-18.00	Santa Rosa Valley	
1-18.01	Santa Rosa Area . . . . .	24, 25, 29
1-18.02	Healdsburg Area . . . . .	24, 25, 29
1-19.00	Anderson Valley . . . . .	
1-20.00	Point Arena . . . . .	
1-21.00	Fort Bragg Terrace . . . . .	
1-98.00	Lower Russian River Valley . . . . .	24
SAN FRANCISCO BAY REGION 2-00.00 (Figure C-1, Sheet 2)		
2-01.00	Petaluma Valley . . . . .	24, 26, 30
2-02.00	Napa-Sonoma Valley	
2-02.01	Napa Valley . . . . .	24, 26, 30
2-02.02	Sonoma Valley . . . . .	24, 26, 30
2-03.00	Suisun-Fairfield Valley . . . . .	24, 26, 30
2-04.00	Pittsburg Plain . . . . .	24, 26
2-05.00	Clayton Valley . . . . .	
2-06.00	Ygnacio Valley . . . . .	24, 27, 30
2-09.00	Santa Clara Valley	
2-09.01	East Bay Area . . . . .	24, 27, 30
2-09.02	South Bay Area . . . . .	24, 27, 31, 32
2-10.00	Livermore Valley . . . . .	24, 27, 30
2-22.00	Half Moon Bay Terrace . . . . .	24, 27, 30
2-24.00	San Gregorio Valley . . . . .	24, 28, 30
2-26.00	Pescadero Valley . . . . .	24, 28, 30
CENTRAL COASTAL REGION 3-00.00 (Figure C-1, Sheet 3)		
3-01.00	Soquel Valley . . . . .	24, 28, 30
3-02.00	Pajaro Valley . . . . .	24
3-03.00	Gilroy-Hollister Valley	
3-03.01	South Santa Clara County . . . . .	24, 28, 30
3-03.02	San Benito County . . . . .	24, 28, 30
3-04.00	Salinas Valley	
3-04.01	Pressure Area . . . . .	24, 30
3-04.02	East Side Area . . . . .	24
3-04.03	Forebay Area . . . . .	24
3-04.04	Arroyo Seco Cone . . . . .	24
3-04.05	Upper Valley Area . . . . .	24, 30
3-04.06	Paso Robles Basin . . . . .	24
3-04.08	Seaside Area . . . . .	24
3-04.09	Langley Area . . . . .	24
3-04.10	Corral De Tierra Area . . . . .	24
3-07.00	Carmel Valley . . . . .	24
3-26.00	West Santa Cruz Terrace . . . . .	24



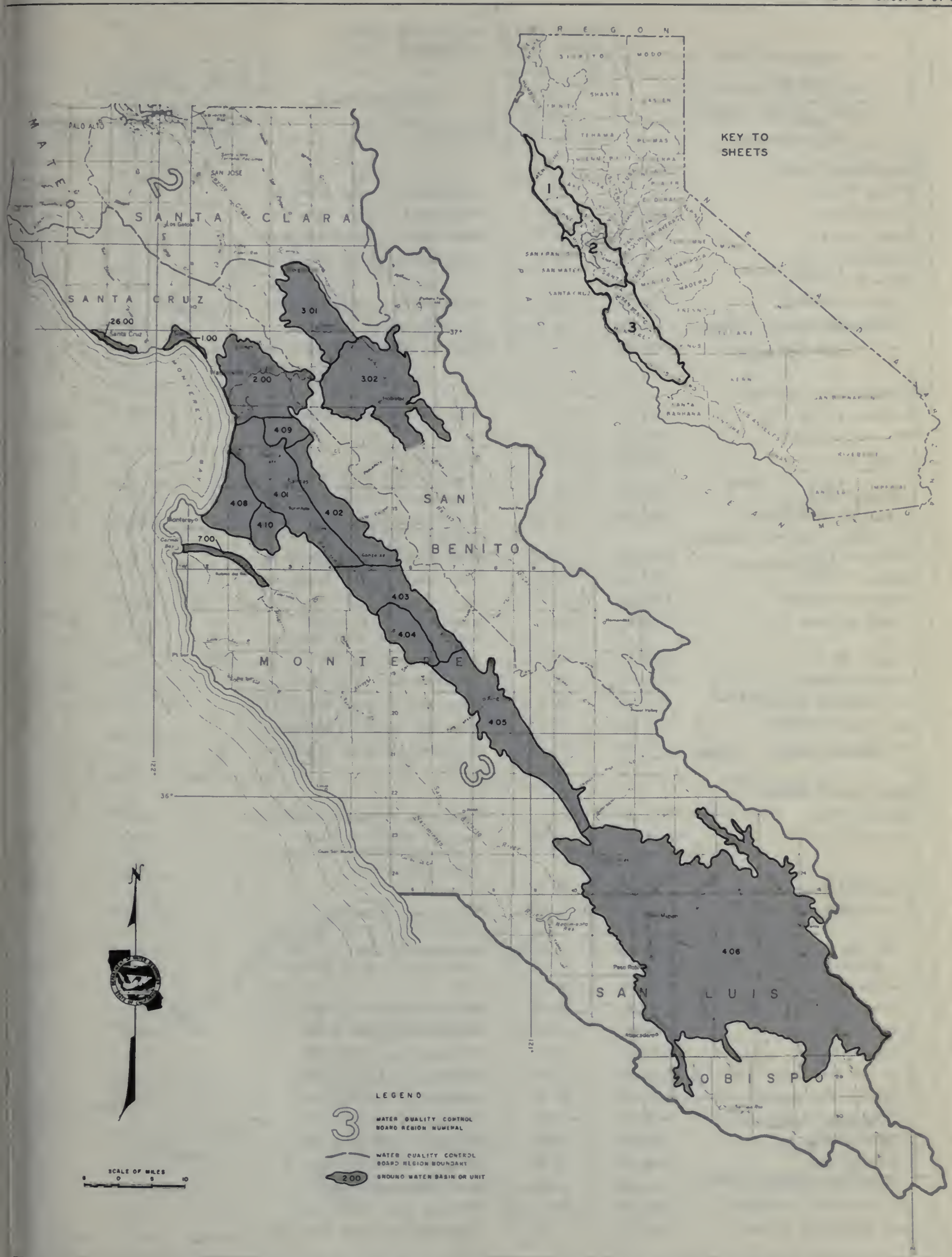
GROUND WATER BASINS IN THE CENTRAL COASTAL AREA





GROUND WATER BASINS IN THE CENTRAL COASTAL AREA





GROUND WATER BASINS IN THE CENTRAL COASTAL AREA



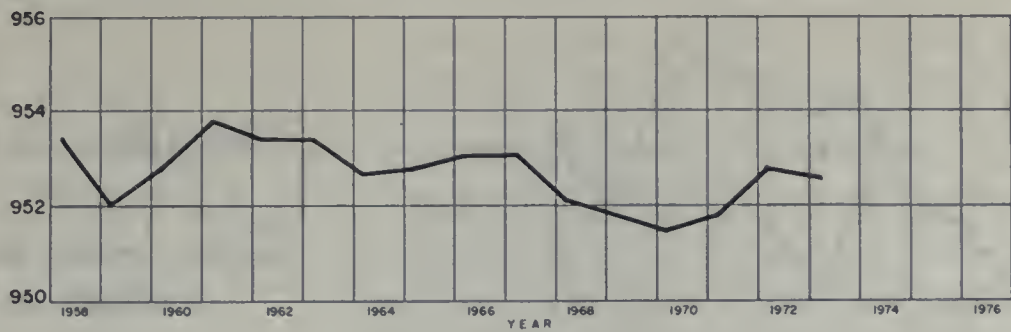
TABLE C-1

AVERAGE CHANGE OF GROUND WATER LEVELS  
AND SUMMARY OF WELL MEASUREMENTS REPORTED

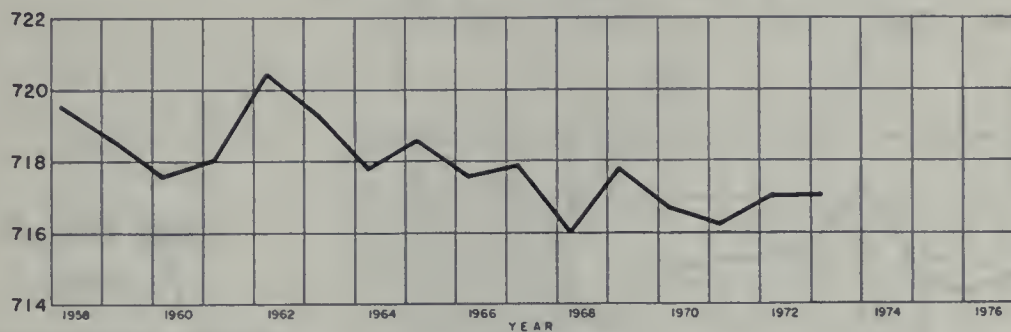
Ground Water Basin or Area		Average Change Spring 1972 to Spring 1973 in Feet	Measuring Agency	Number of Wells Reported		
Name	Number			Monthly 1972-73	Fall 1972	Spring 1973
<b>NORTH COASTAL REGION</b>						
Potter Valley	1-14.00	-0.3	Department of Water Resources	2	2	
Ukiah Valley	1-15.00	0.0	Department of Water Resources	2	2	
Sanel Valley	1-16.00	-1.4	Department of Water Resources	3	3	
Alexander Valley	1-17.00	-0.1	Department of Water Resources	6	6	
Santa Rosa Valley	1-18.00					
Santa Rosa Area	1-18.01	+2.0	Department of Water Resources	12	13	
Healdsburg Area	1-18.02	-0.5	U. S. Geological Survey	9	9	
Lower Russian River Valley	1-98.00		Department of Water Resources		2	
<b>SAN FRANCISCO BAY REGION</b>						
Petaluma Valley	2-01.00	+3.0	Department of Water Resources	6	6	
Napa-Sonoma Valley	2-02.00					
Napa Valley	2-02.01	+1.3	Napa County Department of Water Resources	6	98 6	
Sonoma Valley	2-02.02	+3.2	Department of Water Resources	5	5	
Suisun-Fairfield Valley	2-03.00	+2.5	Solano County Department of Water Resources	8	14 14	
Pittsburg Plain	2-04.00	+1.5	Department of Water Resources		6 5	
Ygnacio Valley	2-06.00	+3.3	Department of Water Resources		5 5	
Santa Clara Valley	2-09.00					
East Bay Area	2-09.01	+11.0	Alameda County FC & WCD Alameda County Water District	3	45 491 491	
South Bay Area	2-09.02	+5.7	Santa Clara Valley WD	235		
Livermore Valley	2-10.00	+4.3	Alameda County FC & WCD	8	142 142	
Half Moon Bay Terrace	2-22.00	+4.9	Department of Water Resources		8 8	
San Gregorio Valley	2-24.00	+2.0	Department of Water Resources		5 5	
Pescadero Valley	2-26.00	+5.2	Department of Water Resources		7 7	
<b>CENTRAL COASTAL REGION</b>						
Soquel Valley	3-01.00	+2.0	Department of Water Resources		3 3	
Pajaro Valley	3-02.00	-2.6*	Monterey County FC & WCD Department of Water Resources Santa Cruz County		39 7 49	
Gilroy-Hollister Valley	3-03.00	+0.7				
South Santa Clara County	3-03.01	+4.4	Santa Clara Valley WD Department of Water Resources		6 17	
San Benito County	3-03.02	-0.6	San Benito County Department of Water Resources		68 7	
Salinas Valley	3-04.00	+0.9				
Pressure Area	3-04.01	+3.4*	Monterey County FC & WCD		135	
East Side Area	3-04.02	-3.1*	Monterey County FC & WCD		67	
Forebay Area	3-04.03	-0.6*	Monterey County FC & WCD		42	
Arroyo Seco Cone	3-04.04	-2.9*	Monterey County FC & WCD		19	
Upper Valley Area	3-04.05	+1.7*	Monterey County FC & WCD		43	
Paso Robles Basin	3-04.06	+10.0	San Luis Obispo FC & WCD		36	
Seaside Area	3-04.08	0.0*	Monterey County FC & WCD		12	
Langley Area	3-04.09	-5.9*	Monterey County FC & WCD		16	
Corral de Tierra Area	3-04.10	-4.2*	Monterey County FC & WCD		25	
Carmel Valley	3-07.00	+3.6	Monterey County FC & WCD		28	
West Santa Cruz Terrace	3-26.00		Department of Water Resources		3 2	
<b>TOTAL</b>				254	1360	915

\*Average change determined from water level measurements made during fall of 1971 and fall of 1972.

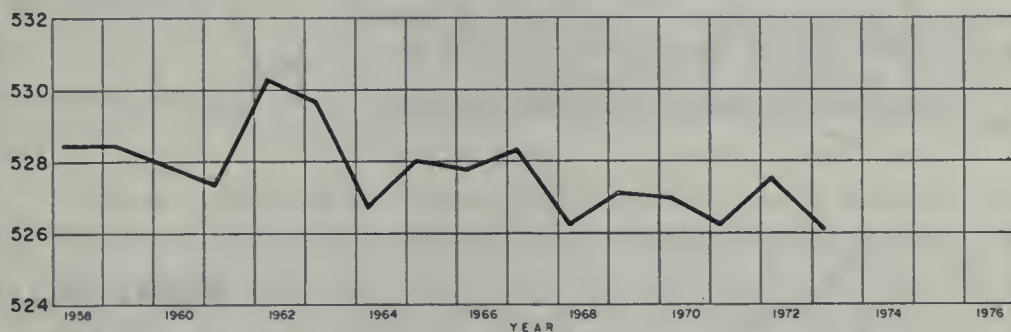
ELEVATION IN FEET - U. S. C. & G. S. DATUM



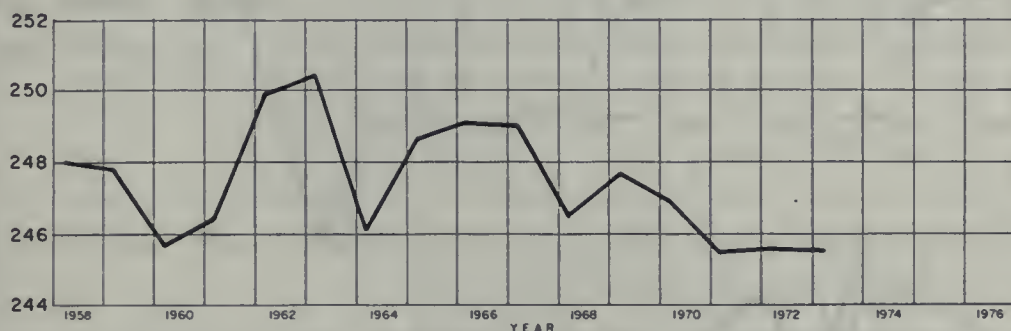
POTTER VALLEY  
 1 - 14.00  
 AVERAGE GROUND SURFACE  
 ELEVATION 960'



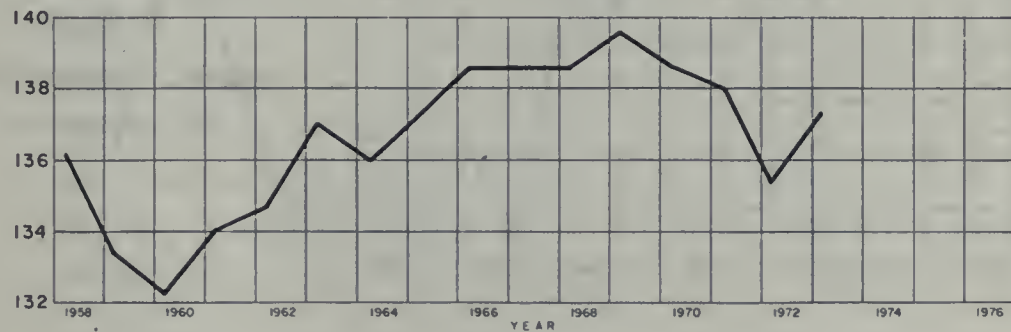
UKIAH VALLEY  
 1 - 15.00  
 AVERAGE GROUND SURFACE  
 ELEVATION 725'



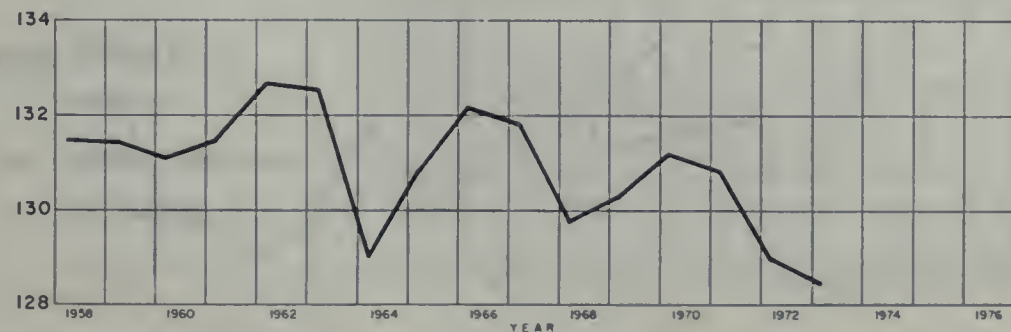
SANEL VALLEY  
 1 - 16.00  
 AVERAGE GROUND SURFACE  
 ELEVATION 535'



ALEXANDER VALLEY  
 1 - 17.00  
 AVERAGE GROUND SURFACE  
 ELEVATION 255'



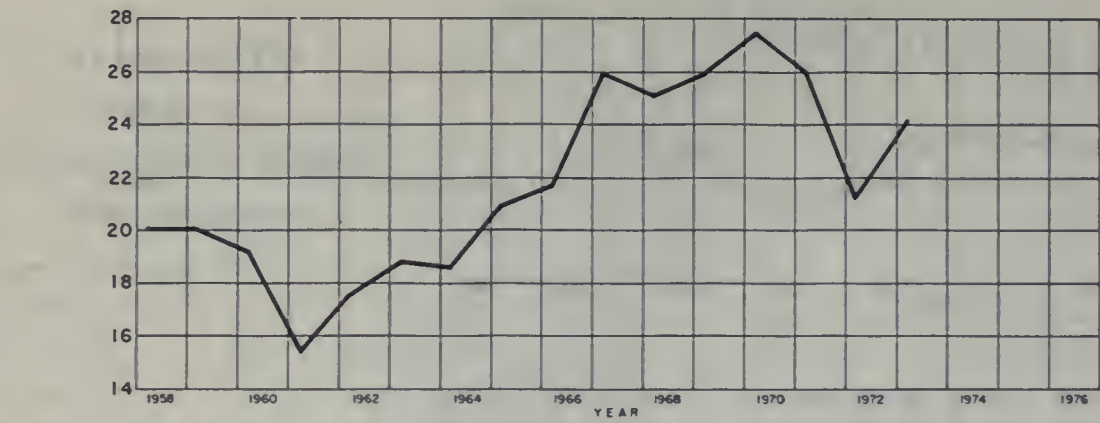
SANTA ROSA AREA  
 1 - 18.01  
 AVERAGE GROUND SURFACE  
 ELEVATION 150'



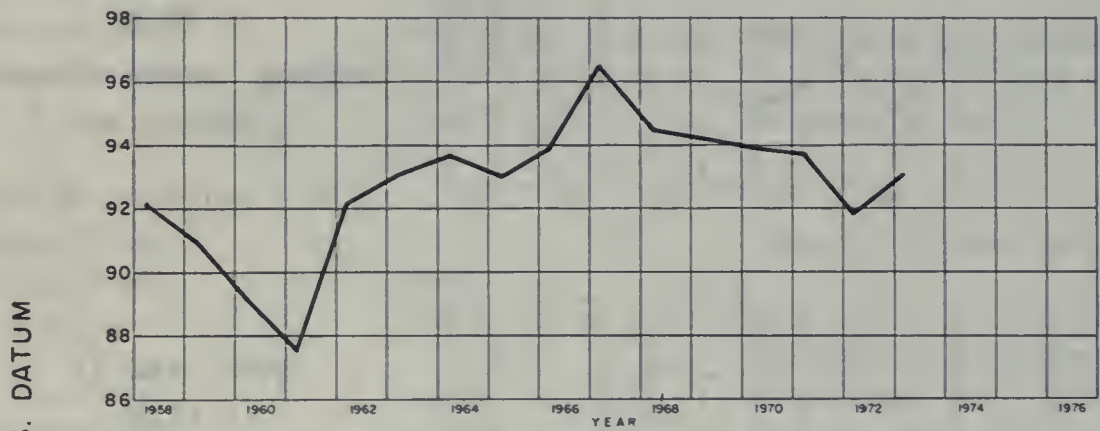
HEALDSBURG AREA  
 1 - 18.02  
 AVERAGE GROUND SURFACE  
 ELEVATION 145'

FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS

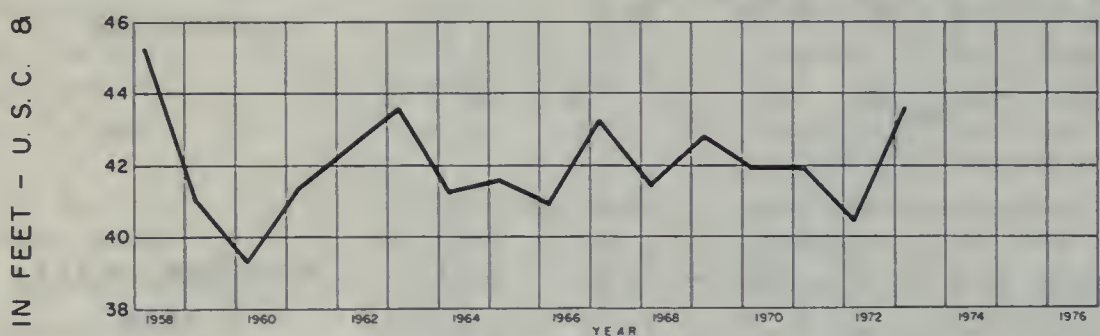




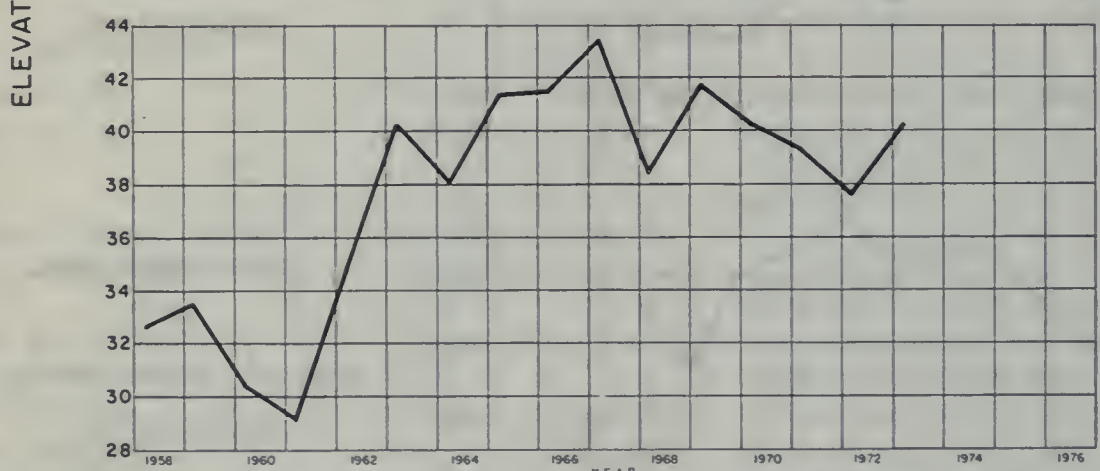
PETALUMA VALLEY  
 2 - 01.00  
 AVERAGE GROUND SURFACE  
 ELEVATION 42'



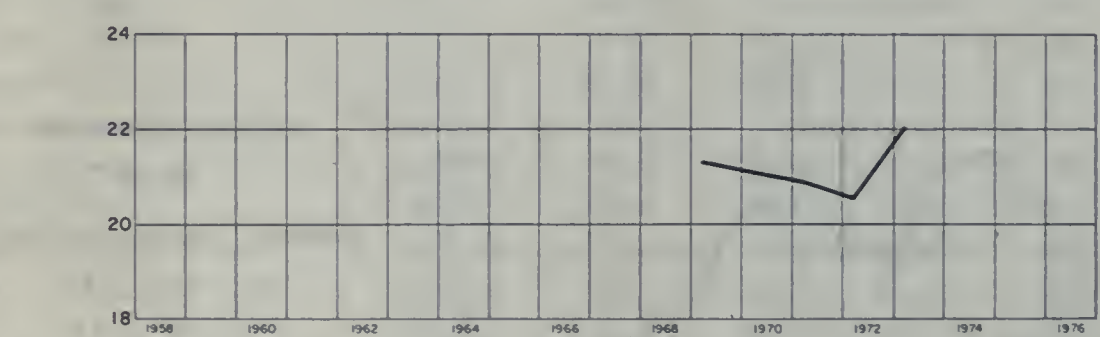
NAPA VALLEY  
 2 - 02.01  
 AVERAGE GROUND SURFACE  
 ELEVATION 105'



SONOMA VALLEY  
 2 - 02.02  
 AVERAGE GROUND SURFACE  
 ELEVATION 60'



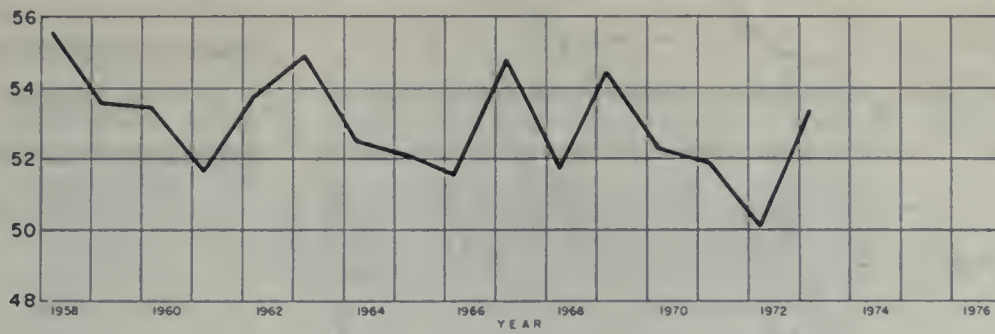
SUISUN-FAIRFIELD VALLEY  
 2 - 03.00  
 AVERAGE GROUND SURFACE  
 ELEVATION 47'



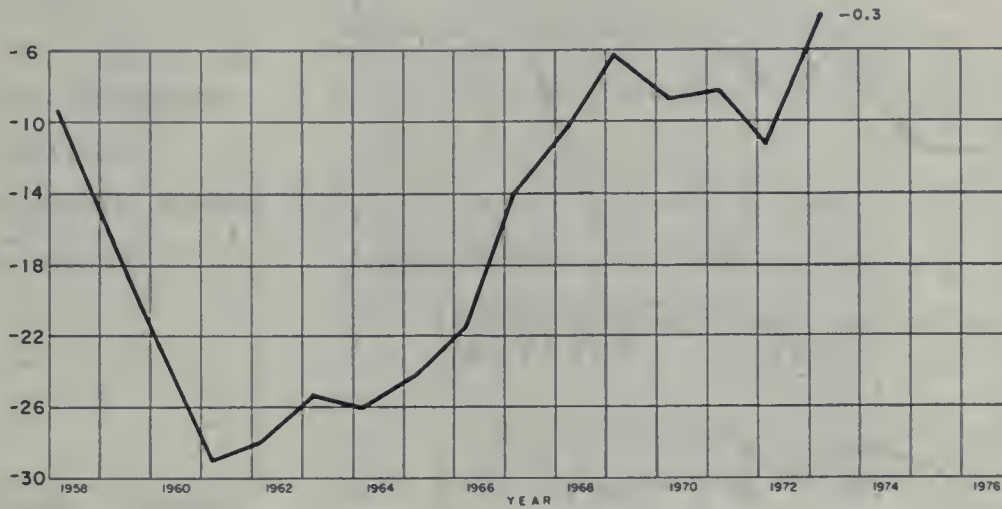
PITTSBURG PLAIN  
 2 - 04.00  
 AVERAGE GROUND SURFACE  
 ELEVATION 55'

FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS

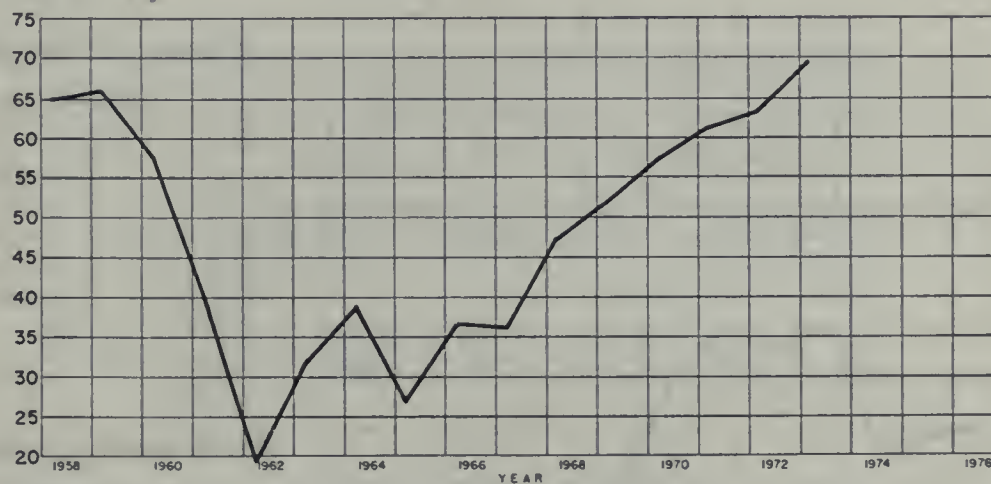
ELEVATION IN FEET - U. S. C. & G. S. DATUM



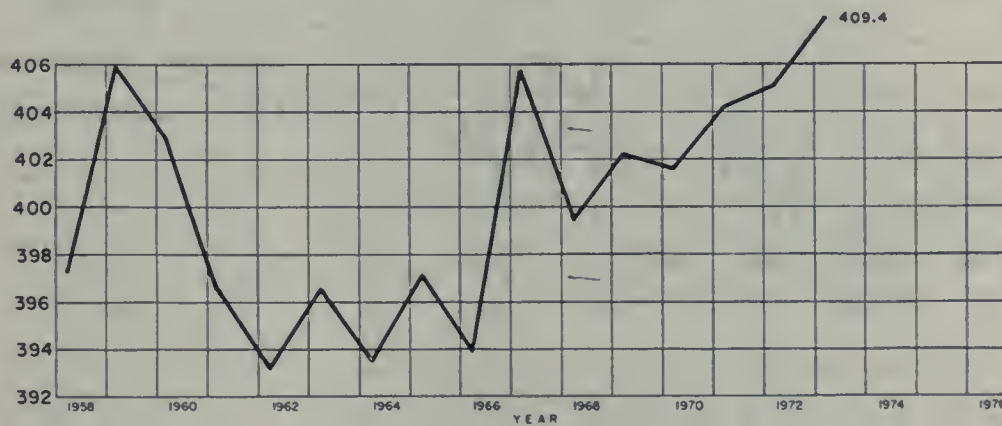
YGNACIO VALLEY  
2 - 06.00  
AVERAGE GROUND SURFACE  
ELEVATION 70'



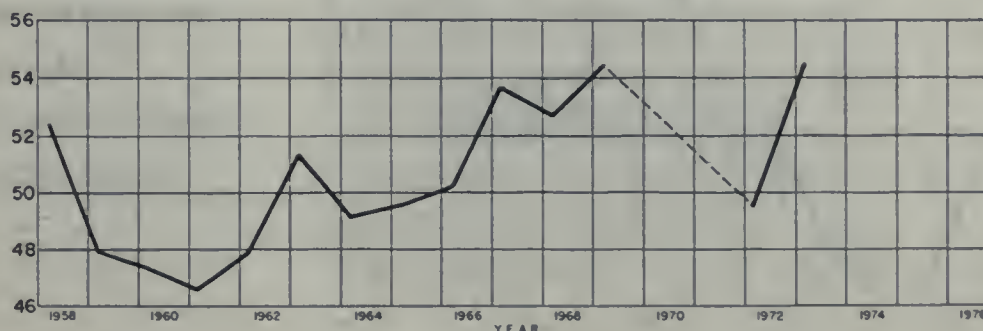
SANTA CLARA VALLEY  
EAST BAY AREA  
2 - 09.01  
AVERAGE GROUND SURFACE  
ELEVATION 34'



SANTA CLARA VALLEY  
SOUTH BAY AREA  
2 - 09.02  
AVERAGE GROUND SURFACE  
ELEVATION 155'



LIVERMORE VALLEY  
2 - 10.00  
AVERAGE GROUND SURFACE  
ELEVATION 460'

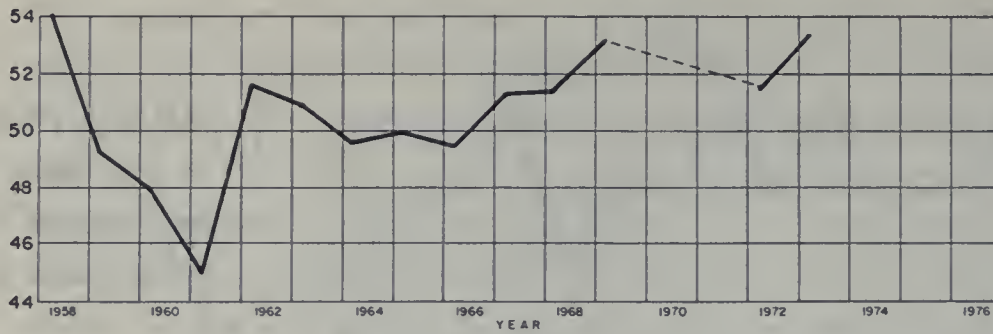


HALF MOON BAY TERRACE  
2 - 22.00  
AVERAGE GROUND SURFACE  
ELEVATION 70'

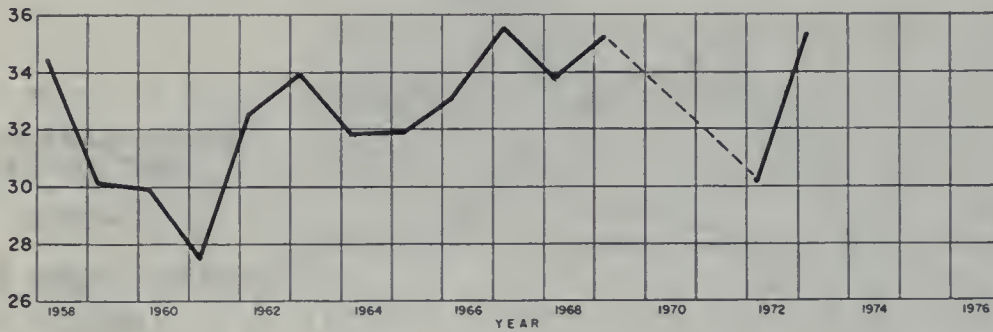
FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS



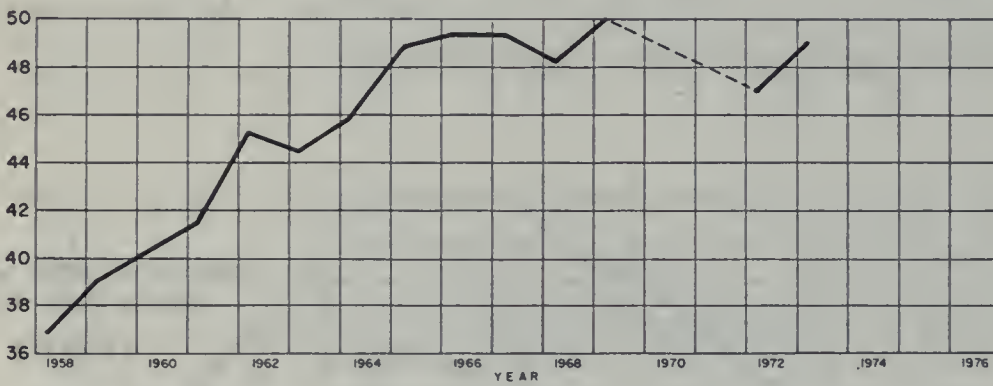
ELEVATION IN FEET - U. S. C. & G. S. DATUM



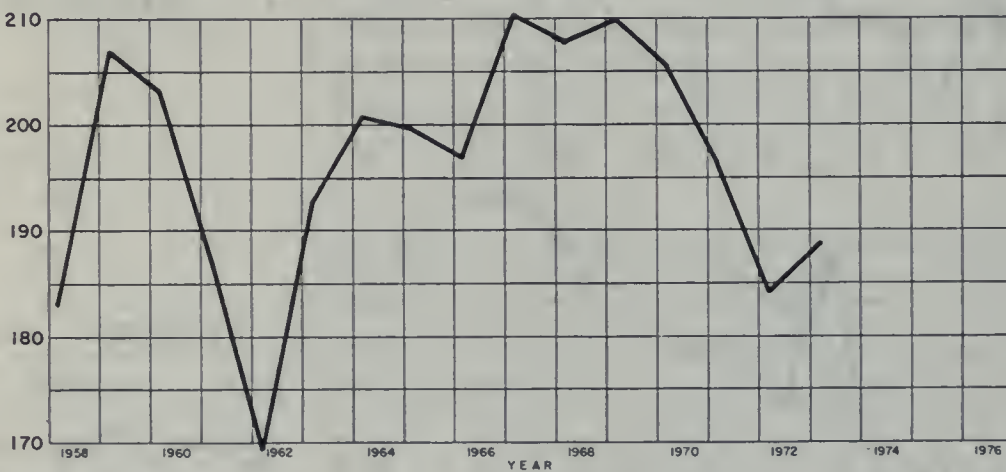
SAN GREGORIO VALLEY  
2-24.00  
AVERAGE GROUND SURFACE  
ELEVATION 60'



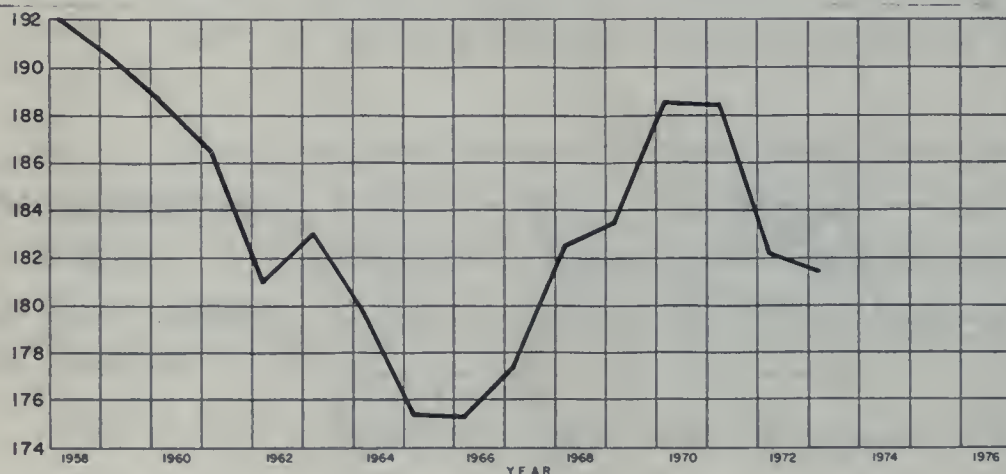
PESCADERO VALLEY  
2-26.00  
AVERAGE GROUND SURFACE  
ELEVATION 40'



SOQUEL VALLEY  
3-01.00  
AVERAGE GROUND SURFACE  
ELEVATION 110'



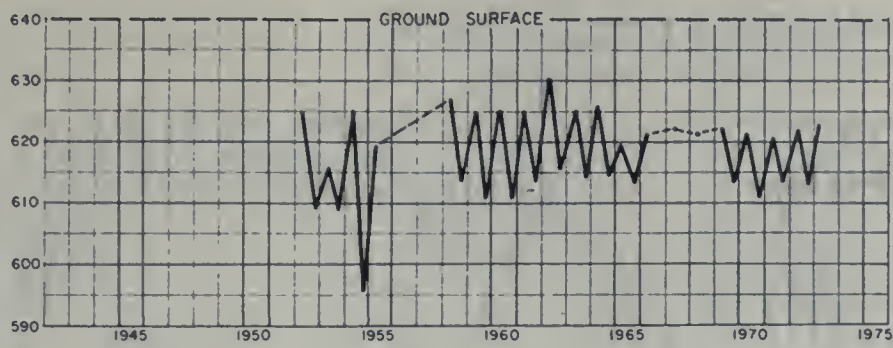
SOUTH SANTA CLARA COUNTY  
3-03.01  
AVERAGE GROUND SURFACE  
ELEVATION 240'



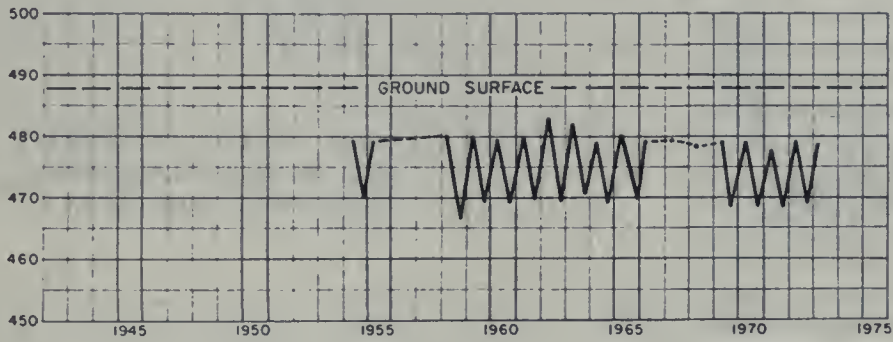
SAN BENITO COUNTY  
3-03.02  
AVERAGE GROUND SURFACE  
ELEVATION 260'

FLUCTUATION OF AVERAGE GROUND WATER LEVEL IN SELECTED AREAS

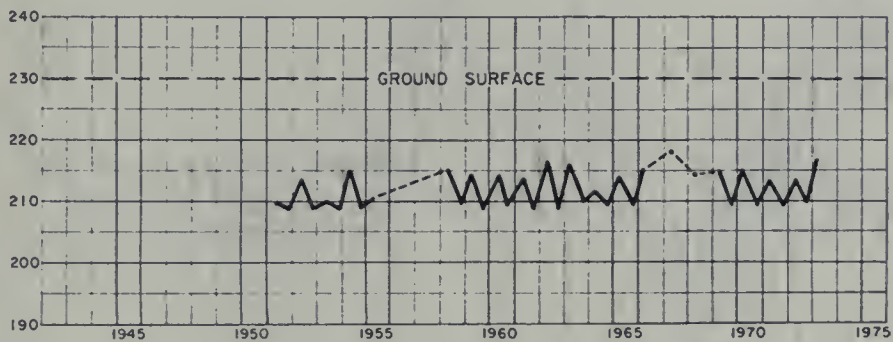
ELEVATION IN FEET - U. S. G. S. DATUM



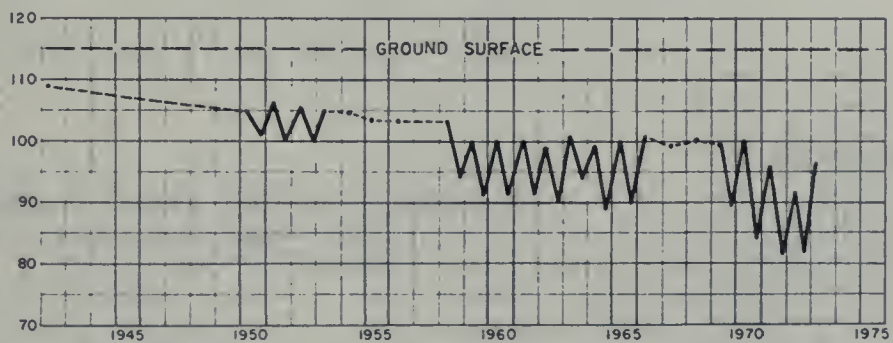
UKIAH VALLEY (I-15.00)  
WELL NUMBER 15N/12W-8L1  
GROUND SURFACE ELEVATION 640'



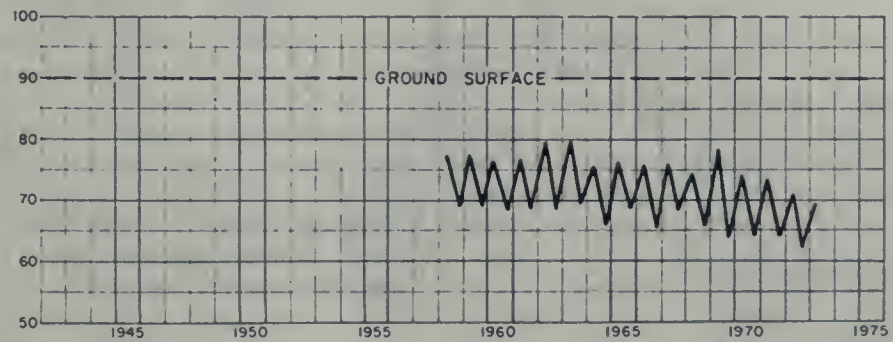
SANEL VALLEY (I-16.00)  
WELL NUMBER 13N/11W - 19P1  
GROUND SURFACE ELEVATION 488'



ALEXANDER VALLEY (I-17.00)  
WELL NUMBER 10N/9W-18B1  
GROUND SURFACE ELEVATION 230'



SANTA ROSA AREA (I-18.01)  
WELL NUMBER 6N/8W-13R1  
GROUND SURFACE ELEVATION 115'

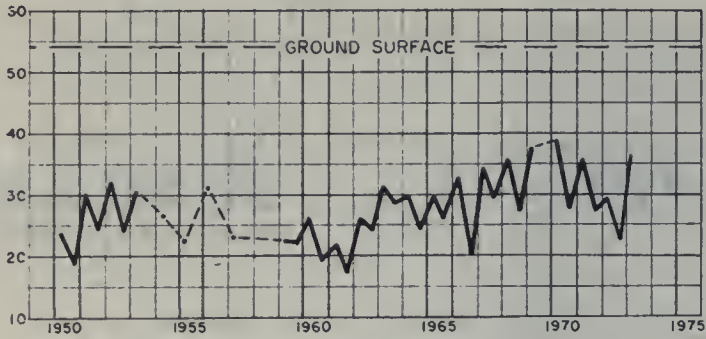


HEALDSBURG AREA (I-18.02)  
WELL NUMBER 9N/9W-28N1  
GROUND SURFACE ELEVATION 90'

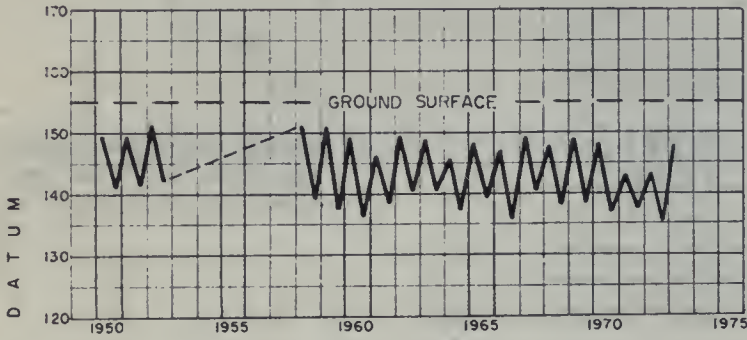
----- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

FLUCTUATION OF WATER LEVEL IN WELLS

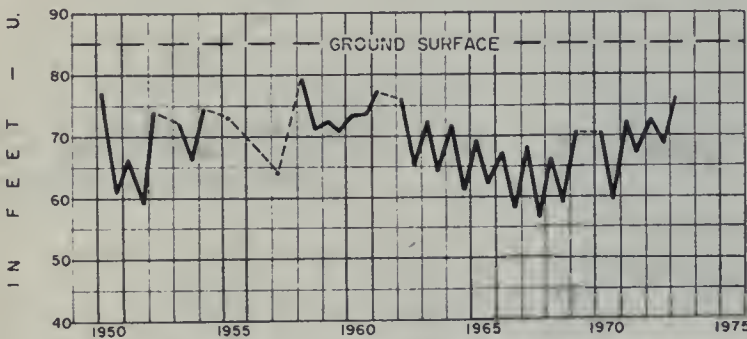




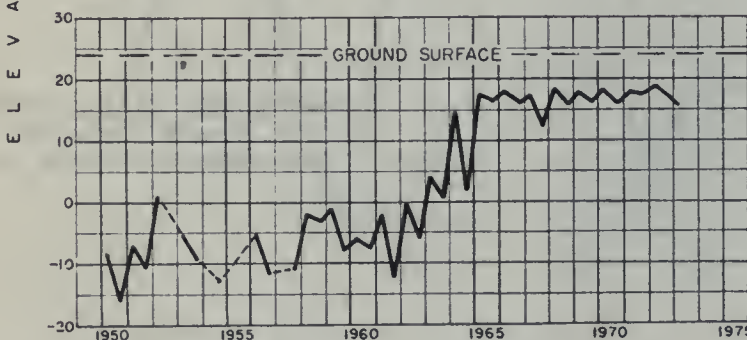
PETALUMA VALLEY (2-01.00)  
WELL NUMBER 5N/7W-26R1  
GROUND SURFACE ELEVATION 54'



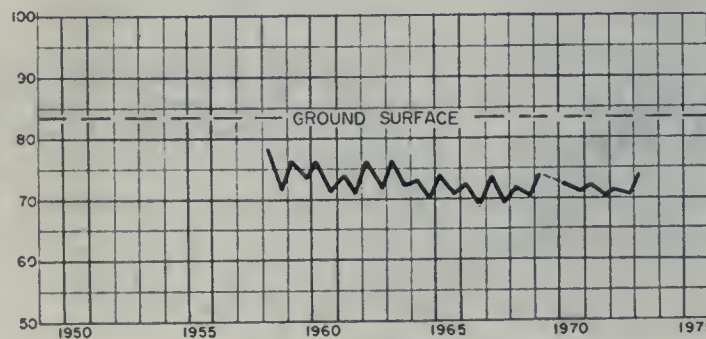
NAPA VALLEY (2-02.01)  
WELL NUMBER 7N/5W-902  
GROUND SURFACE ELEVATION 155'



SONOMA VALLEY (2-02.02)  
WELL NUMBER 5N/5W-17C1  
GROUND SURFACE ELEVATION 85'



SUISUN - FAIRFIELD VALLEY (2-03.00)  
WELL NUMBER 5N/2W-27J2  
GROUND SURFACE ELEVATION 24'

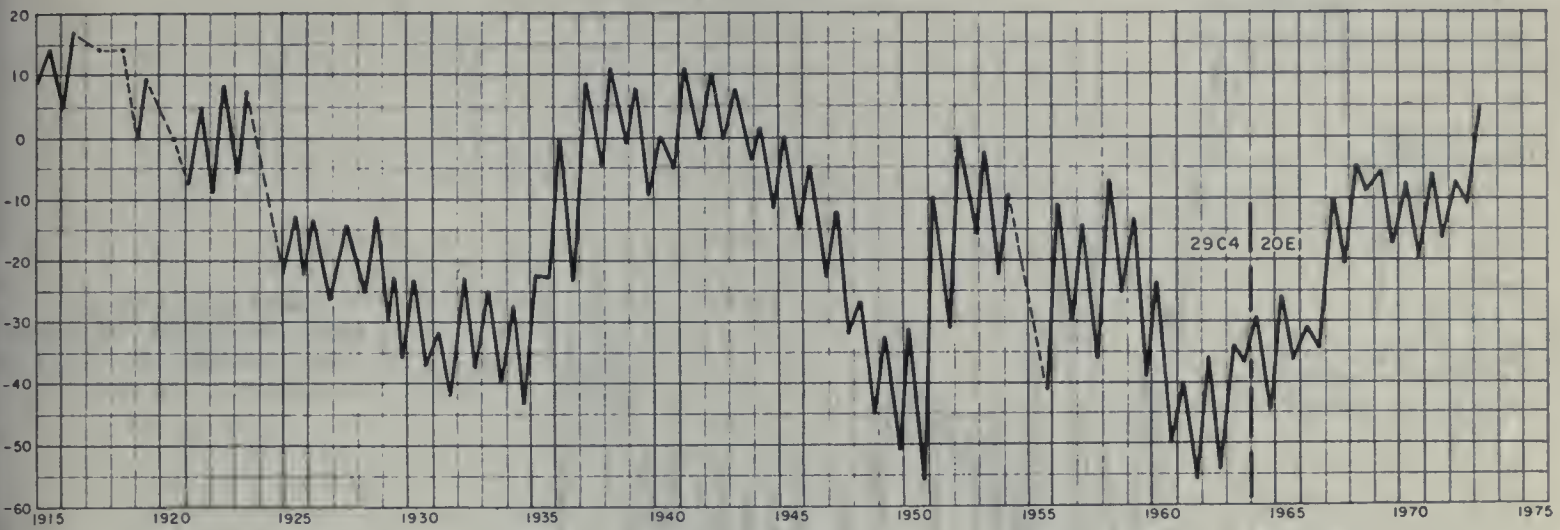


YGNACIO VALLEY (2-06.00)  
WELL NUMBER 1N/1W-7K1  
GROUND SURFACE ELEVATION 83'

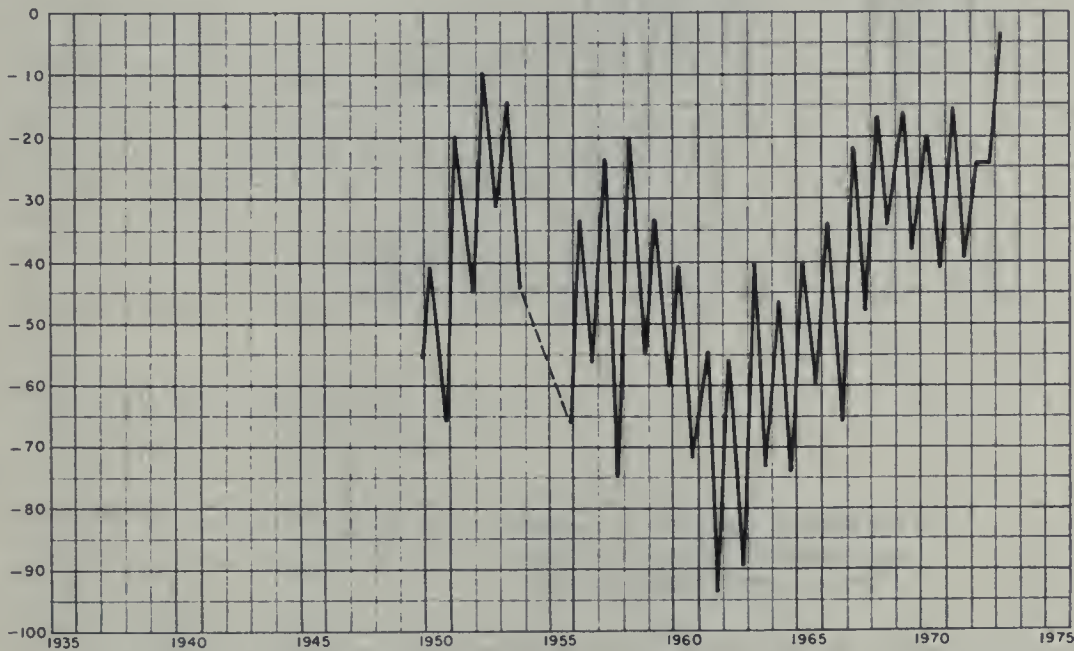
----- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

FLUCTUATION OF WATER LEVEL IN WELLS

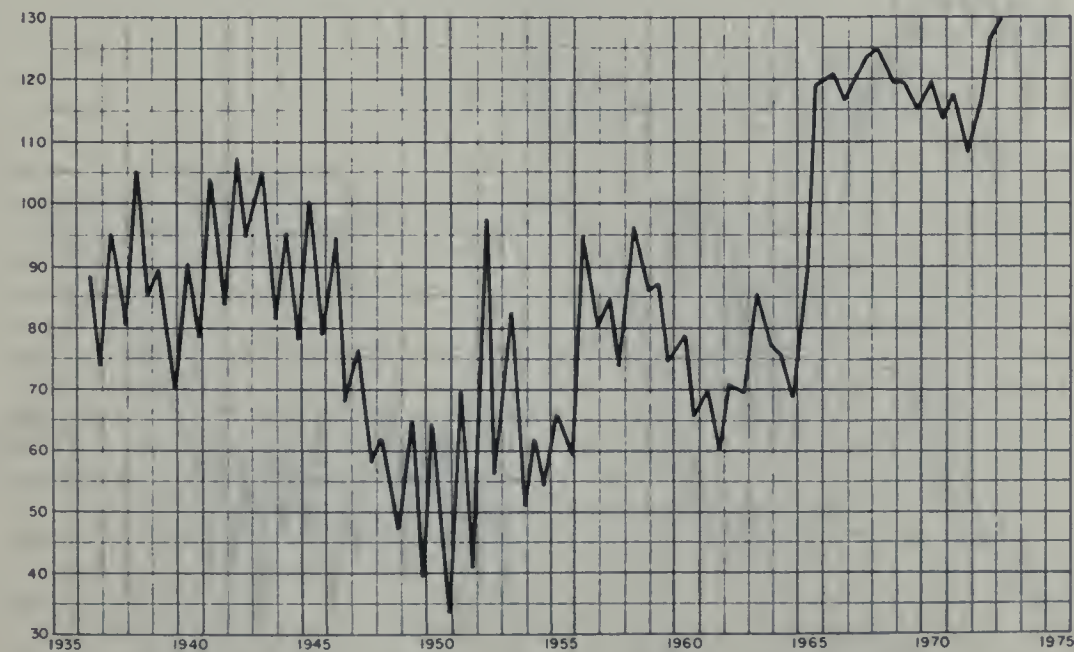
SANTA CLARA VALLEY  
 EAST BAY AREA - UPPER AQUIFER (2-09.01)  
 WELL NUMBERS 4S/IW-29C4, 20E1  
 GROUND SURFACE ELEVATION 55'



ELEVATION IN FEET - U. S. G. S. DATUM



SANTA CLARA VALLEY  
 EAST BAY AREA  
 LOWER AQUIFER (2-09.01)  
 WELL NUMBER 5S/IW-5F1  
 GROUND SURFACE ELEVATION 36'

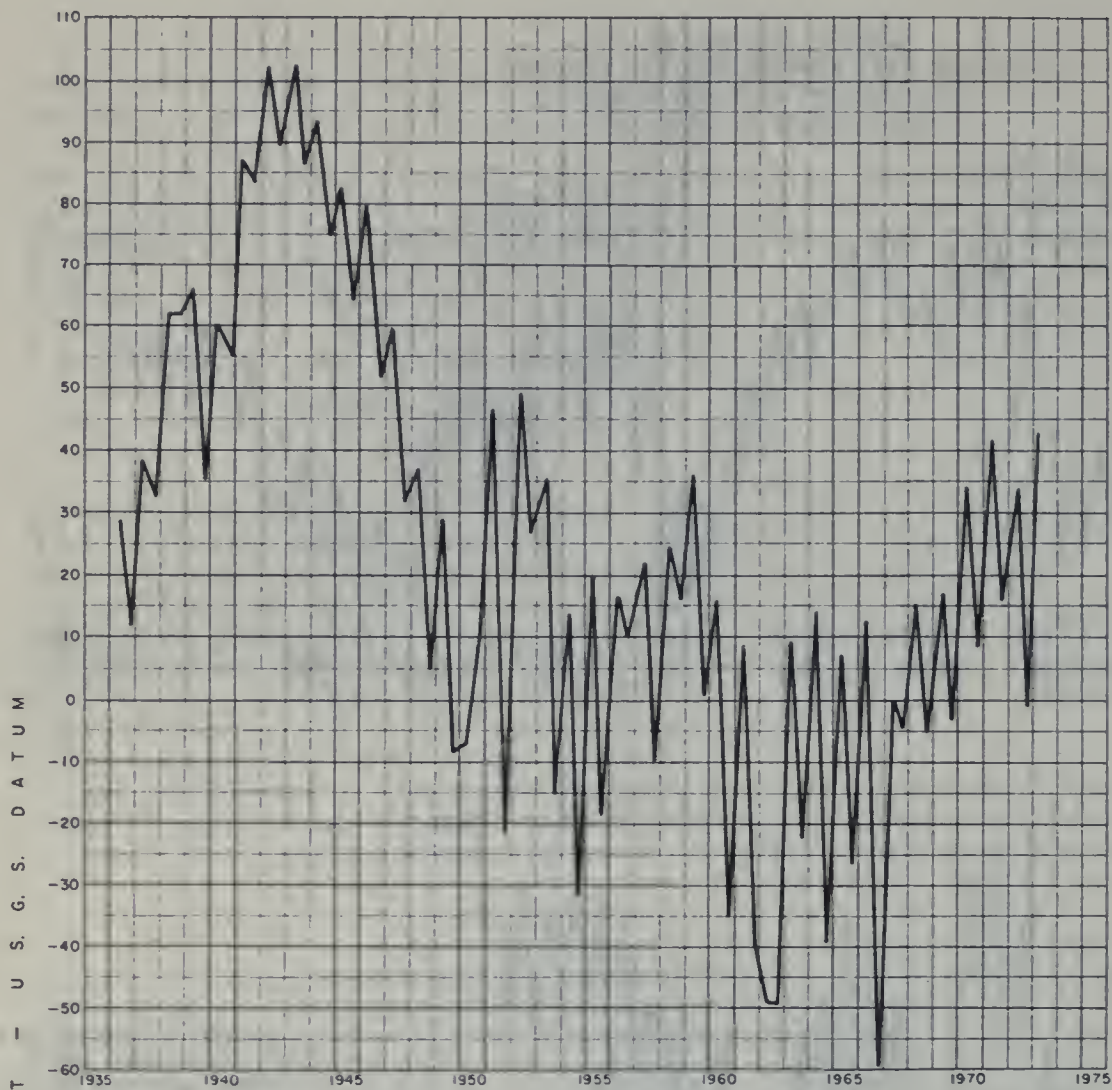


SANTA CLARA VALLEY  
 SOUTH BAY AREA (2-09.02)  
 WELL NUMBER 6S/IE-23P2  
 GROUND SURFACE ELEVATION 240'

----- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

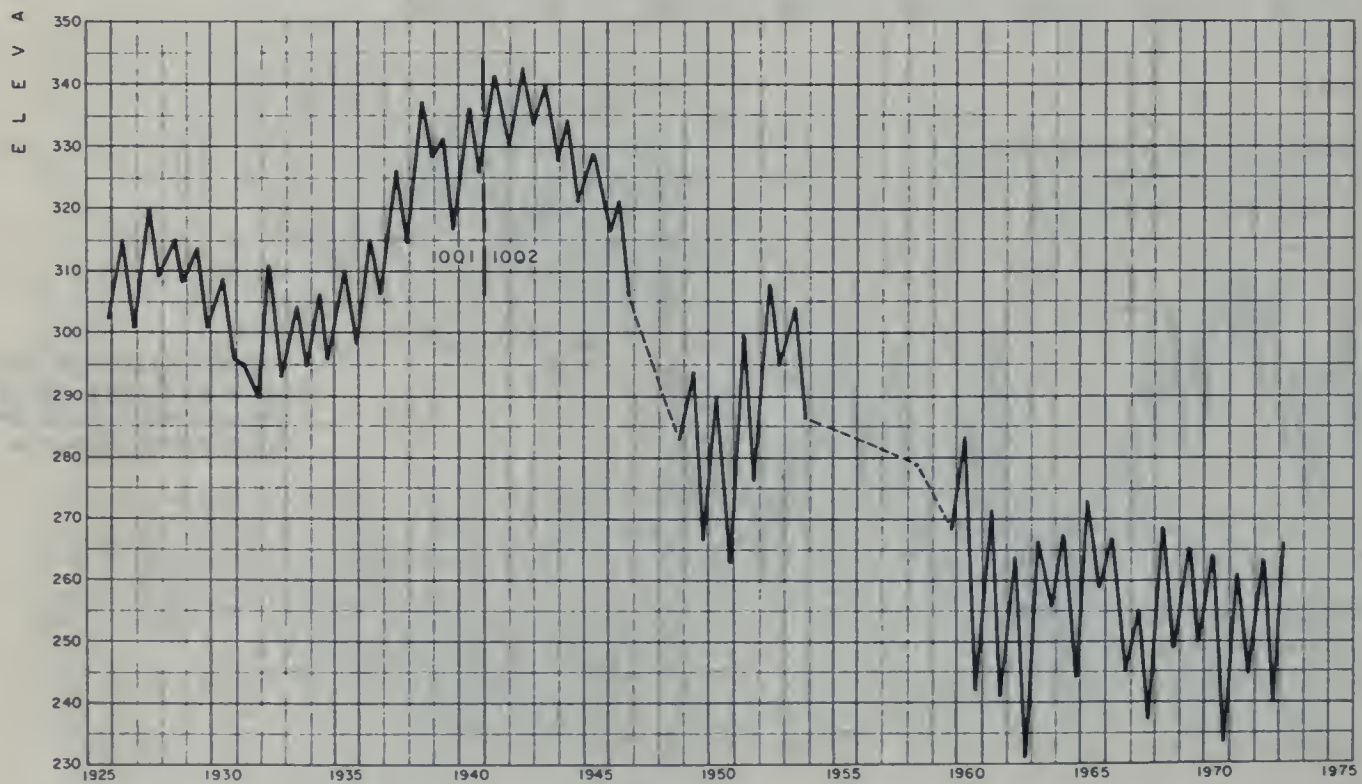
FLUCTUATION OF WATER LEVEL IN WELLS





SANTA CLARA VALLEY  
SOUTH BAY AREA (2-09.02)  
WELL NUMBER 7S/IE-31A2  
GROUND SURFACE ELEVATION 152'

LIVERMORE VALLEY (2-10.00)  
WELL NUMBERS 3S/IE-10Q1, 10Q2  
GROUND SURFACE ELEVATION 369'

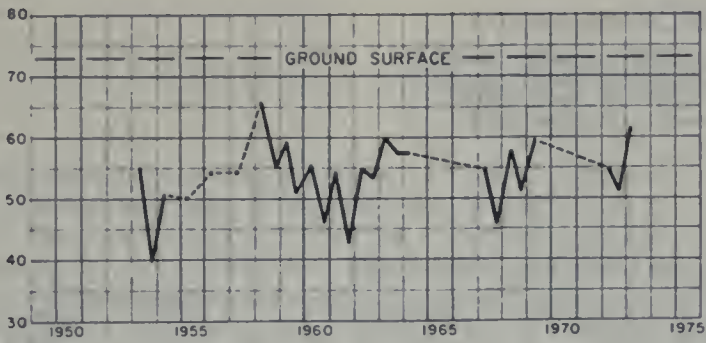


----- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

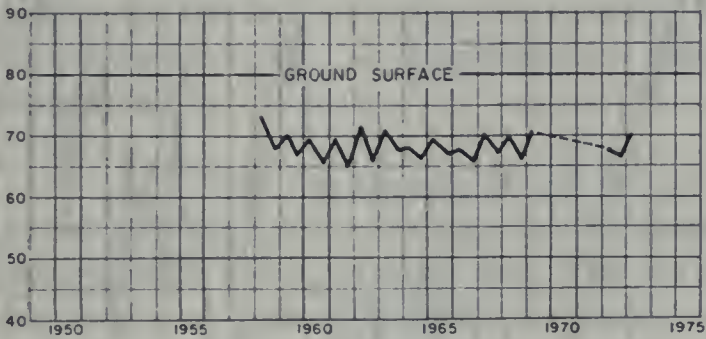
FLUCTUATION OF WATER LEVEL IN WELLS



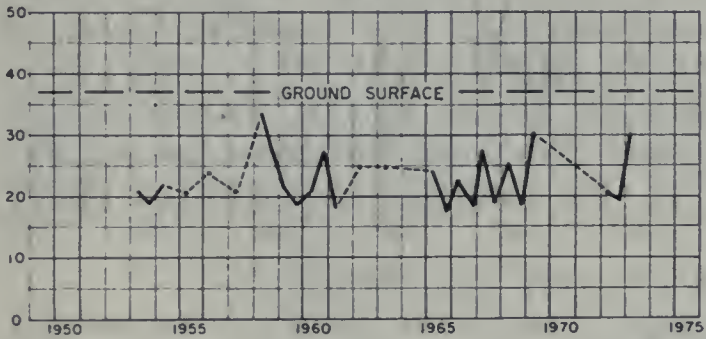
E L E V A T I O N I N F E E T - U . S . G . S . D A T U M



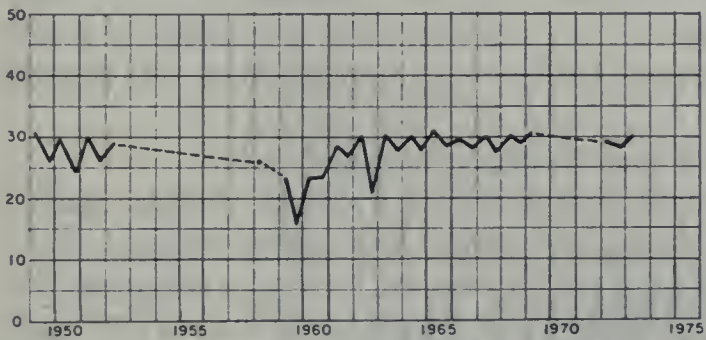
HALF MOON BAY TERRACE (2-22.00)  
WELL NUMBER 5S/5W-20L1  
GROUND SURFACE ELEVATION 73'



SAN GREGORIO VALLEY (2-24.00)  
WELL NUMBER 7S/5W-14C1  
GROUND SURFACE ELEVATION 80'

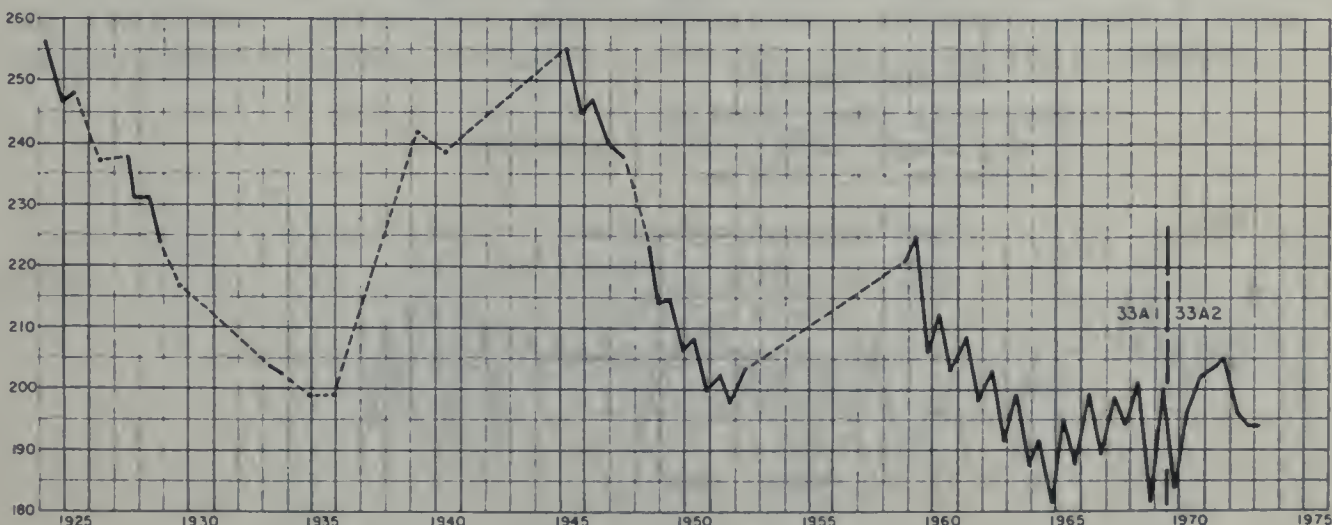


PESCADERO VALLEY (2-26.00)  
WELL NUMBER 8S/5W-10K1  
GROUND SURFACE ELEVATION 37'



SOQUEL VALLEY (3-01.00)  
WELL NUMBER 11S/1W-10C1  
GROUND SURFACE ELEVATION 30'

GILROY - HOLLISTER VALLEY  
SAN BENITO COUNTY (3-03.02)  
WELL NUMBERS 12S/5E-33A1, 33A2  
GROUND SURFACE ELEVATION 280'

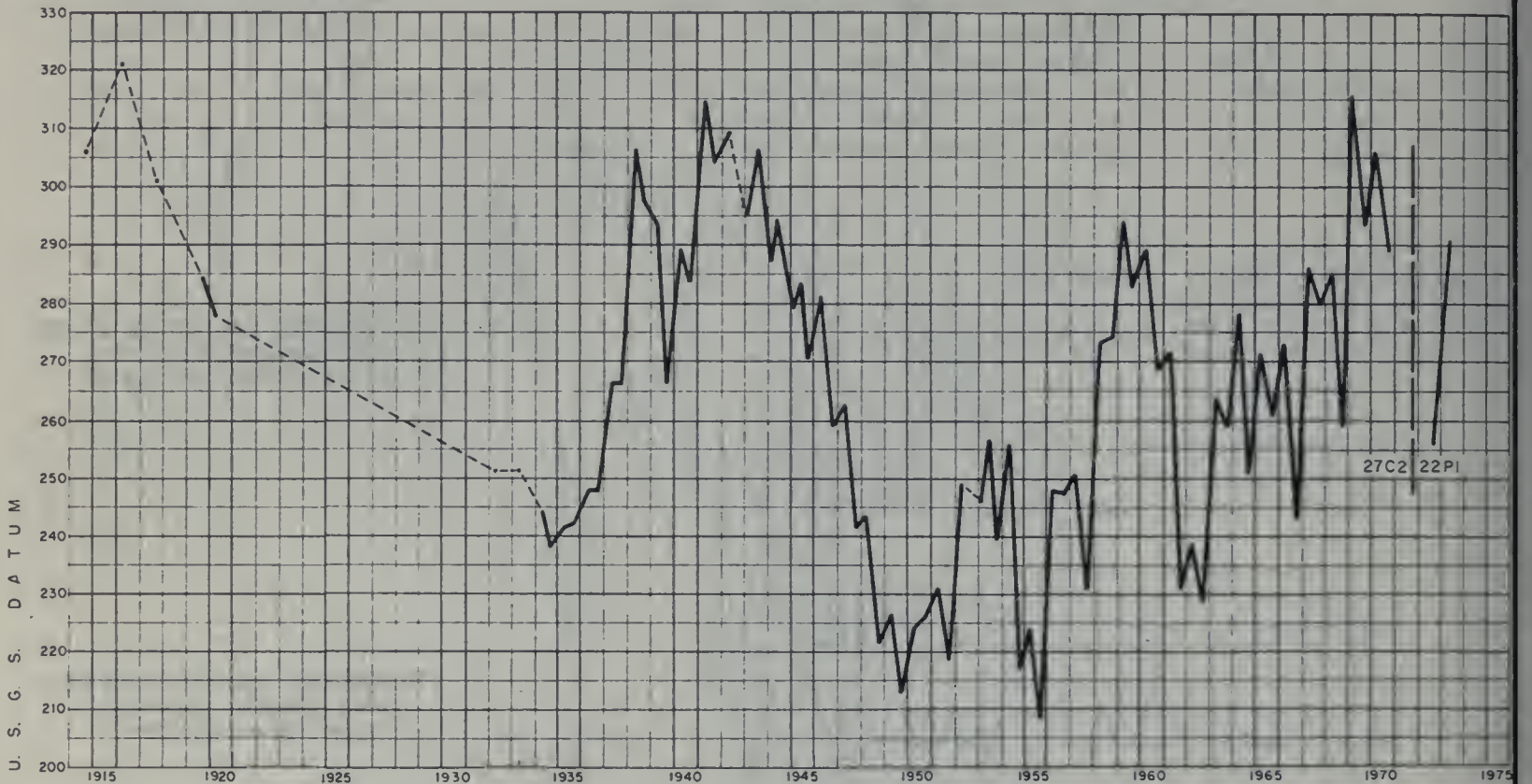


----- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

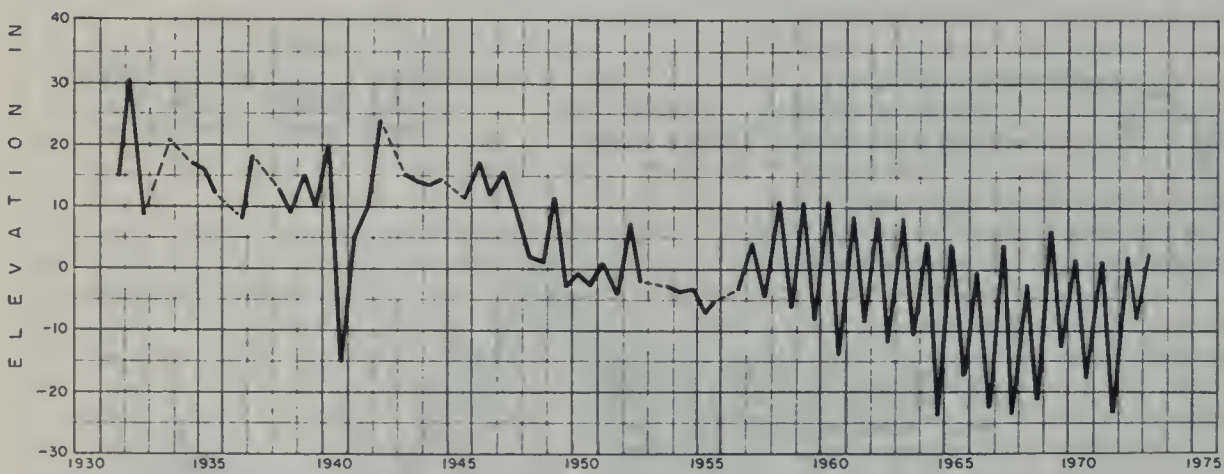
FLUCTUATION OF WATER LEVEL IN WELLS



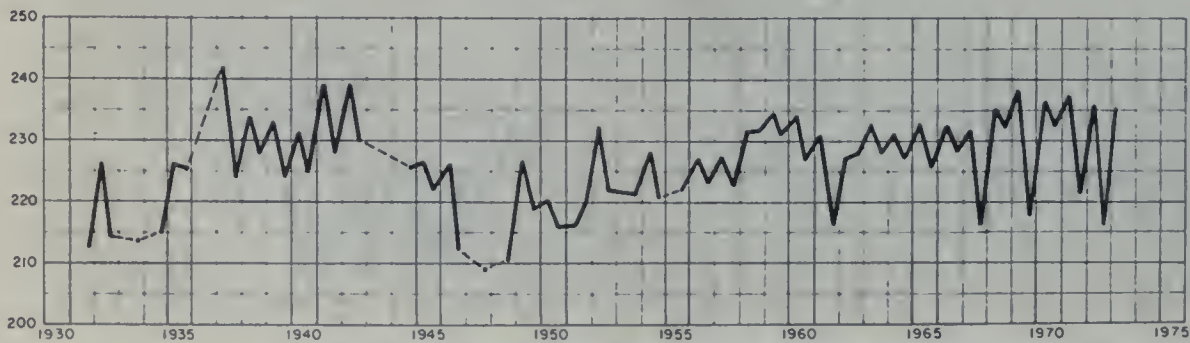
GILROY - HOLLISTER VALLEY  
 SOUTH SANTA CLARA COUNTY (3-03.01)  
 WELL NUMBER 9S/3E - 27C2, 22P1  
 GROUND SURFACE ELEVATION 347.354'



SALINAS VALLEY  
 PRESSURE AREA - 400' AQUIFER (3-04.01)  
 WELL NUMBER 14S/3E - 18J1  
 GROUND SURFACE ELEVATION 69'



SALINAS VALLEY  
 UPPER VALLEY AREA (3-04.05)  
 WELL NUMBER 19S/7E - 10P1  
 GROUND SURFACE ELEVATION 315'



----- CONNECTS MEASUREMENTS MADE AT INTERVALS OF A YEAR OR MORE

FLUCTUATION OF WATER LEVEL IN WELLS



## Appendix D

### SURFACE WATER QUALITY DATA

This appendix contains surface water quality data collected at stream and estuarine stations in the Central Coastal Area during the period from October 1, 1972, through September 30, 1973. Samples were collected by the Department of Water Resources, U. S. Bureau of Reclamation, U. S. Geological Survey, and Santa Cruz County Health Department.

The Department of Water Resources Laboratory used procedures from the latest edition of "Standard Methods for the Examination of Water and Wastewater" for the determination of mineral, nutrient, and biological constituents. Pesticides are determined in accordance with the "Guide to the Analysis of Pesticide Residues", U. S. Department of Health, Education and Welfare, 1965. Laboratory services for the U. S. Bureau of Reclamation are provided by the U. S. Air Force at McClellan Air Force Base. It uses procedures in accordance with the "FWPCA Methods for Chemical Analysis of Water and Wastes", November 1968, for all parameters.

Two numbering systems are used in this bulletin for identifying water quality stations. The first is for those stations for which the flow of water can be measured readily, as in streams and rivers. This system is described in Bulletin No. 157, "Index to Stream Gaging Stations In and Adjacent to California, 1970", Department of Water Resources.

The second numbering system is used for stations located in broad water bodies. This system is described as follows: The first two digits show the hydrographic unit as identified in the introduction to Appendix A. The third digit identifies the type of water body and, for this publication, is a "B" for Bay system; "L" for lake; "O" for Pacific Ocean; "R" for reservoir; and "S" for slough. The next digit is the last digit of the latitude in degrees, "3" for 33°, or "9" for 29°. The last three digits are the minutes of latitude to the tenth of a minute. The last four digits are the longitude in the same manner as latitude. A fifth digit indicates a sequence number when two stations have the same 8-digit latitude and longitude numbers.

Example: E0 B 802.3 207.1 2

E0	San Francisco Bay
B	Water Body -- Bay
8	38° Latitude
02.3	02.3' Latitude
2	122° Longitude
07.1	07.1' Longitude
2	Second Station



TABLE D-1  
SAMPLING STATION DATA AND INDEX

Station	Station Number	Location		Beginning of Record	Data on Pagea Indicated							
		Latitude ° ' "	Longitude ° ' "		Table Number							Figure Number D-1
					D-2	D-3	D-4	D-5	D-6	D-7	D-8	
ALISAL CREEK AT OLD STAGE ROAD	D2 1255.50	36 41 30	121 34 06	Jan. 1952	42							37
APTOS CREEK BELOW VALENCIA CREEK	D0 2020.00	36 58 26	121 54 10	March 1970	41		59	69				37
ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE	E5 1423.01	37 34 24	121 41 18	Nov. 1972	53	57	67	76				38
BIG RIVER NEAR MENDOCINO	F8 2720.00	39 18 48	123 42 12	Jan. 1959	54							39
BLANCO DRAIN AT PUMP LIFT	D2 1030.30	36 42 36	121 44 36	May 1970	42	57	59	69	78			37
BRANCIFORTE CREEK AT SANTA CRUZ	D0 1100.00	36 59 10	122 00 47	March 1970	41		59	69				37
CARMEL RIVER AT ROBLES DEL RIO	D4 1200.00	36 28 30	121 43 36	Jan. 1952	43		59	69				37
CHADBOURNE SLOUGH AT CHADBOURNE ROAD	EOS 811.0 204.8	38 10 57	122 04 50	Jan. 1967	51		66	75				38
CORDELIA SLOUGH AT CYGNUS	EOS 809.2 205.3	38 09 10	122 05 19	Jan. 1967	50		65	74				38
CORDELIA SLOUGH AT UPPER END	EOS 811.5 207.2	38 11 27	122 07 09	Sept. 1967	52		66	75				38
GABILAN CREEK NEAR SANTA RITA	D2 1240.00	36 45 18	121 36 36	Jan. 1952	42							37
GREEN VALLEY CREEK AT CORDELIA	E3 2100.51	38 12 42	122 07 47	Dec. 1968	53		67	76				38
GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH	EOB 807.0 202.3	38 07 02	122 02 19	Jan. 1968	49	57	65	73				38
HILL SLOUGH AT GRIZZLY ISLAND ROAD	EOS 813.6 201.2	38 13 34	122 01 14	Jan. 1967	52		66	75				38
HONKER BAY NEAR WHEELER POINT	EOB 804.4 156.2	38 04 26	121 56 12	Jan. 1968	48		64	73				38
LAKE MERRITT AT BOATHOUSE DOCK	E4L 748.1 215.6	37 48 08	122 15 35	March 1972	53			76	78			38
MERRITT LAKE DRAIN AT PUMP	D2 1006.60	36 45 06	121 44 12	Aug. 1970	42		59	69	78			37
MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD	EOS 811.2 158.5	38 11 14	121 58 32	Feb. 1967	51		66	75				38
NAPA RIVER NEAR NAPA	E3 1250.00	38 22 06	122 18 08	Nov. 1929	53							38
NAVARRO RIVER NEAR NAVARRO	F8 2100.00	39 10 15	123 39 55	Jan. 1959	54							39
NOYO RIVER NEAR FORT BRAGG	F8 3100.00	39 25 55	123 44 10	Jan. 1951	54							39
OLD SALINAS RIVER ABOVE TEMBLADERO SLOUGH	D2 1006.50	36 46 12	121 47 12	April 1972	42	57						37
PACHECO CREEK AT HIGHWAY 156 BRIDGE	D1 1667.50	36 56 36	121 23 00	Jan. 1952	42							37
PAJARO RIVER AT CHITTENDEN	D1 1250.00	36 54 00	121 35 54	Dec. 1951	41		59	69				37
PAJARO RIVER AT THURWACHTER ROAD	D1 1075.30	36 52 48	121 47 30	May 1970	41	57						37
PANCHO RICO CREEK AT SARGENTS ROAD	D2 1773.20	36 01 12	120 53 18	Jan. 1952	43							37
QUAIL CREEK AT OLD STAGE ROAD	D2 1260.50	36 37 00	121 31 18	Jan. 1952	42							37
RUSSIAN RIVER NEAR GUERNEVILLE	F9 1100.00	38 30 00	122 56 05	Nov. 1969	54					80		39
SACRAMENTO RIVER AT CHIPPS ISLAND	EOB 802.8 155.0	38 02 47	121 55 02	Jan. 1968	46	57	62	71	78			38
SALINAS RECLAMATION CANAL AT AIRPORT WAY	D2 1020.70	36 39 42	121 37 18	May 1970	42	57						37
SALINAS RECLAMATION CANAL AT ALISAL S.T.P.	D2 1016.50	36 40 06	121 38 06	May 1969	42							37
SALINAS RIVER NEAR BRADLEY	D2 1850.00	35 55 42	120 52 00	Aug. 1958	43		59	69				37
SALINAS RIVER NEAR GONZALES	D2 1325.10	36 29 12	121 28 06	May 1969	43	57	59	69				37
SAN BENITO RIVER AT HIGHWAY 156 BRIDGE	D1 2000.00	36 51 06	121 25 42	March 1957	42							37
SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL	D1 2450.00	36 36 30	121 12 00	Aug. 1958	42		59	69				37
SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)	EOB 736.2 212.0	37 36 10	122 12 00	June 1971	43		60	70	78		82	38
SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	EOB 735.0 215.0	37 35 01	122 14 59	Sept. 1969	43		59	69	78		82	38
SAN FRANCISCO BAY AT TREASURE ISLAND	EOB 749.2 222.4	37 49 15	122 22 26	July 1965	44		60	70	78		82	38
SAN LORENZO CREEK AT FOOTHILL LINE	D2 1663.05	36 16 06	121 04 06	Jan. 1952	43							37
SAN LORENZO RIVER AT BOULDER CREEK	D0 1498.01	37 06 47	122 06 40	March 1970	41		59	69				37
SAN LORENZO RIVER AT PARADISE PARK	D0 1180.01	37 00 37	122 02 34	Sept. 1969	41		59	69		79		37
SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER	EOB 805.3 226.3	38 05 20	122 26 20	March 1971	49		64	73				38
SAN PABLO BAY NEAR PINOLE POINT	EOB 801.8 222.3	38 01 50	122 22 15	March 1971	44	57	60	71				38
SAN PABLO BAY NEAR RODEO	EOB 803.5 217.0	38 03 50	122 17 00	March 1971	46	57	62	72	78			38
SCOTT CREEK AT HIGHWAY 1	D0 4010.01	37 02 26	122 13 39	March 1970	41		59	69				37
SOQUEL CREEK AT SOQUEL	D0 3100.00	36 59 29	121 57 17	Dec. 1951	41		59	69				37
SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES	EOB 802.7 207.0	38 02 40	122 07 00	Sept. 1972	45	57	61	71	78			38
SUISUN BAY OFF MIDDLE POINT	EOB 803.6 159.3	38 03 36	121 59 20	Jan. 1968	47		63	72				38
SUISUN BAY NEAR PORT CHICAGO	EOB 803.5 201.4	38 03 30	122 01 25	Aug. 1946	46							38
SUISUN BAY NEAR PRESTON POINT	EOB 804.0 203.0	38 03 58	122 03 00	Sept. 1968	47	57	63	72	78			38
SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND	EOS 810.8 202.8	38 10 50	122 02 45	Sept. 1968	50		65	74				38
UVAS CREEK NEAR MORGAN HILL BL UVAS DAM	D1 1371.50	37 03 36	121 40 18	Aug. 1952	42		59	69				37
ZAYANTE CREEK AT FELTON	D0 1220.01	37 02 53	122 04 00	March 1970	41		59	69				37

HYDROGRAPHIC AREA DESIGNATIONS IN THE CENTRAL COASTAL AREA

Central Coastal Area

- D0 Santa Cruz
- D1 Pajaro-San Benito Rivers
- D2 Lower Salinas River
- D3 Upper Salinas River
- D4 Monterey Coast

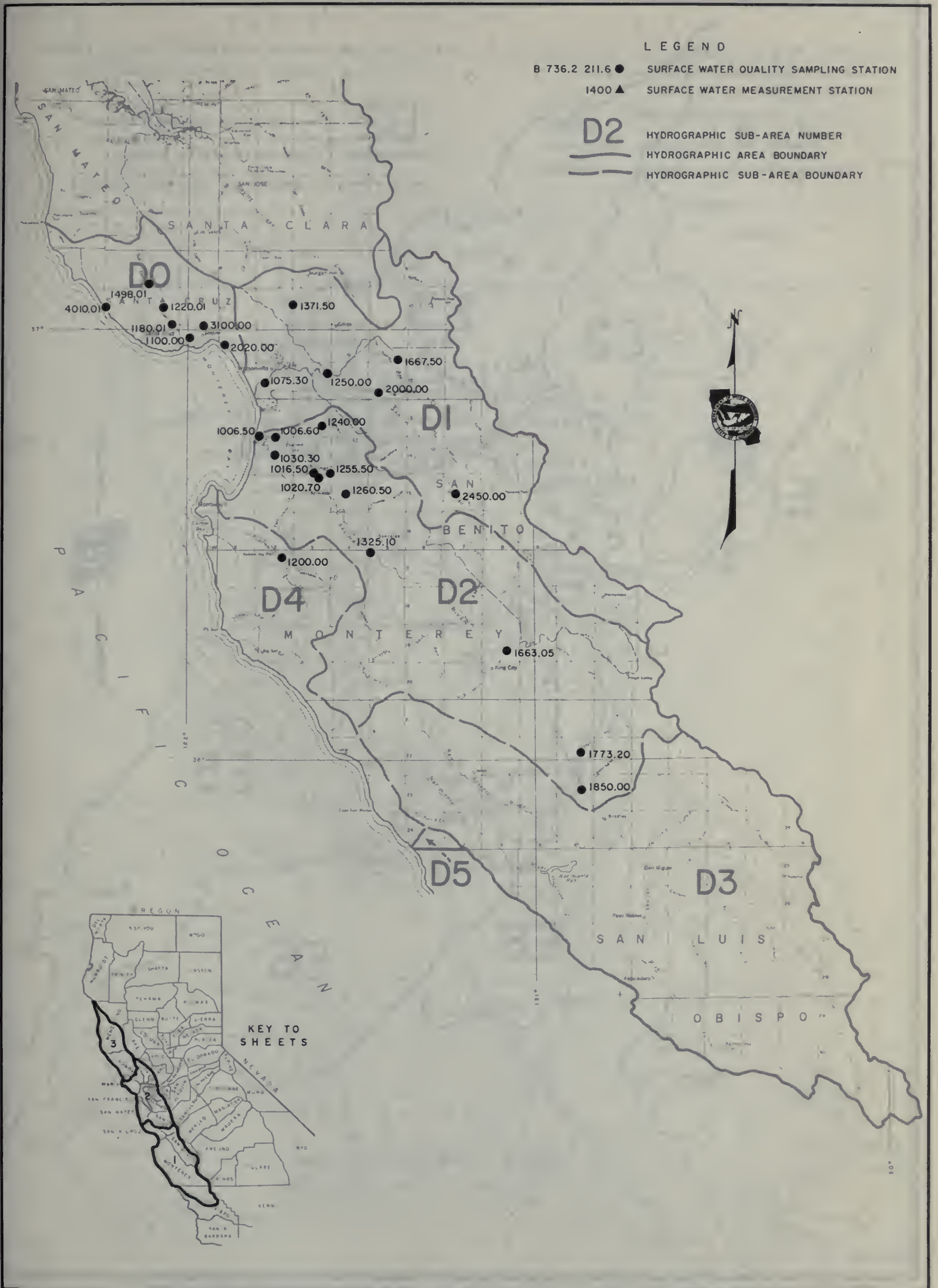
San Francisco Bay Area

- E0 San Francisco Bay
- E1 Coast-Marin
- E2 Marin-Sonoma
- E3 Napa-Solano
- E4 East Bay

North Coastal Area

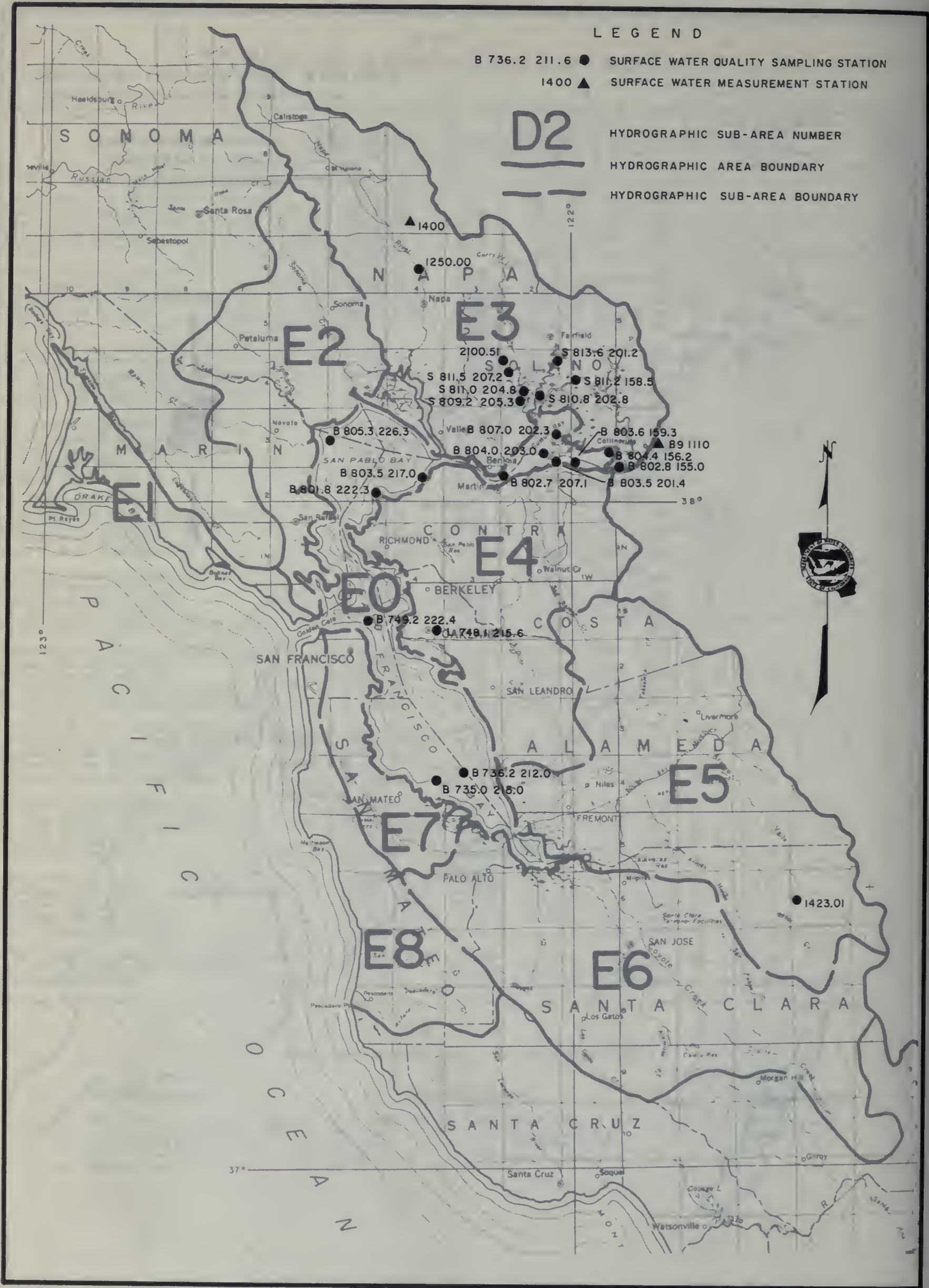
- F8 Mendocino Coast
- F9 Russian River





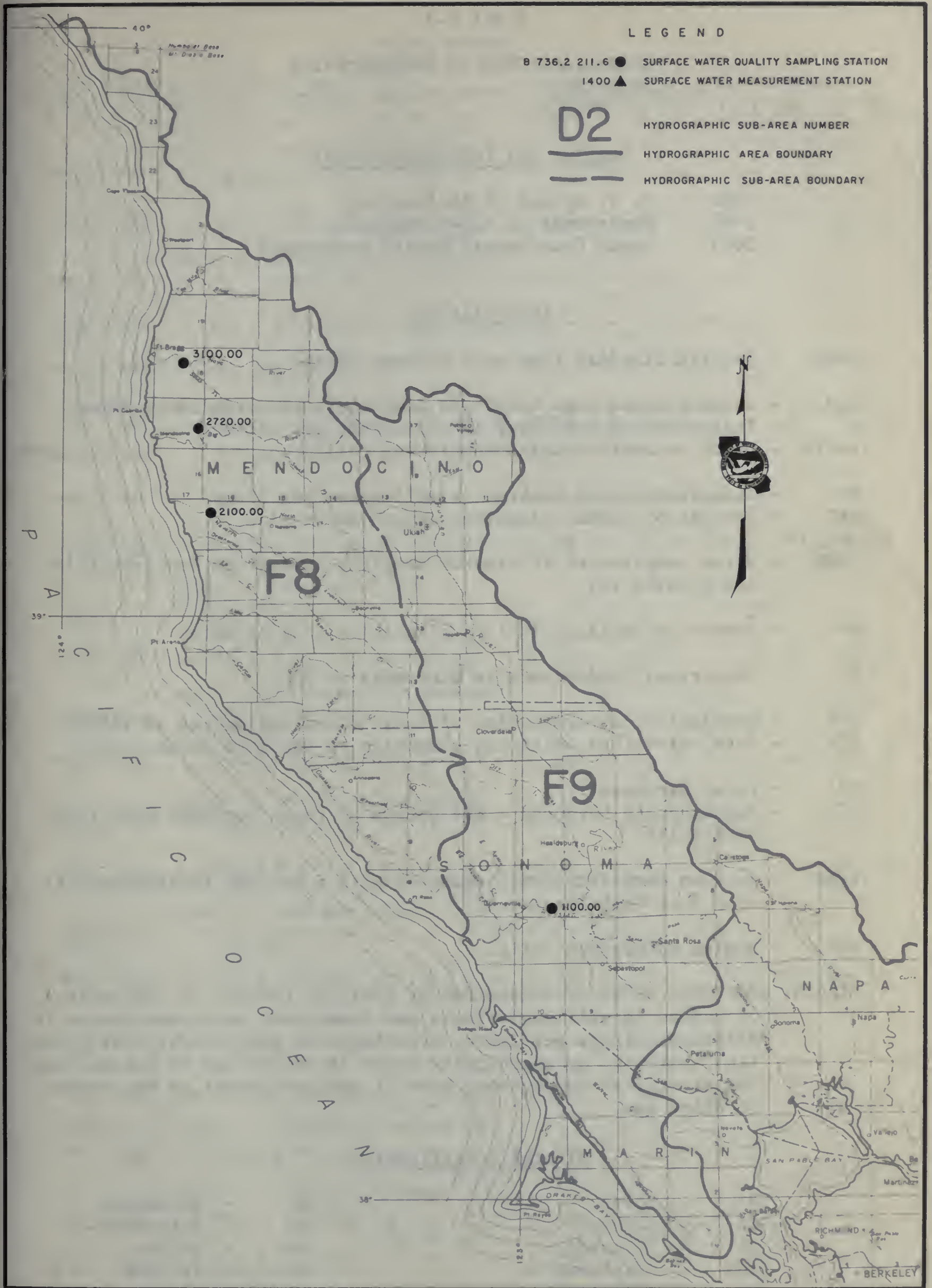
SURFACE WATER OBSERVATION STATIONS 1972-73





SURFACE WATER OBSERVATION STATIONS 1972-73





SURFACE WATER OBSERVATION STATIONS 1972 -73



TABLE D-2

MINERAL ANALYSES OF SURFACE WATER

Sampler and Lab Agency Codes

- 5001 - U. S. Bureau of Reclamation
- 5050 - Department of Water Resources
- 5063 - Santa Cruz County Health Department

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
  - G.H. - Instantaneous gage height in feet above an established datum
  - Q - Instantaneous discharge in cubic feet per second
  - DEPTH - Depth in feet at which sample was collected
  - DO - Dissolved oxygen content in milligrams per liter
  - SAT - Percent of normal dissolved oxygen saturation
  - TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
  - PH - Measure of acidity (<7) or alkalinity (>7) of water
  - EC - Electrical conductance in micromhos at 25°C
  - TDS - Gravimetric determination of total dissolved solids at 180°C
  - SUM - Total dissolved solids by summation of analyzed constituents
  - TH - Total hardness
  - NCH - Noncarbonate hardness - any excess of total hardness over total alkalinity
  - TURB - Jackson Turbidity Units measured with a Hellige Turbidimeter (E) or a Hack Nephelometer (A)
  - SAR - Sodium adsorption ratio
- PERCENT REACTANCE VALUE is determined by dividing the sum of the cations or anions in milliequivalents per liter into each constituent in milliequivalents per liter, arriving at a percentage. For a partial analysis, an approximate value is determined by multiplying the electrical conductance by 0.01 and using that as the cation or anion sum.

Mineral Constituents

- |      |   |             |      |   |           |
|------|---|-------------|------|---|-----------|
| B    | - | Boron       | K    | - | Potassium |
| CA   | - | Calcium     | MG   | - | Magnesium |
| CL   | - | Chloride    | NA   | - | Sodium    |
| CO3  | - | Carbonate   | NO3  | - | Nitrate   |
| F    | - | Fluoride    | SI02 | - | Silica    |
| HCO3 | - | Bicarbonate | S04  | - | Sulfate   |





TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER					MILLIEQUIVALENTS PER LITER				
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	TURB SAR				
		D1 1371.50	UVAS CREEK NR MORGAN HILL BL UVAS DAM																				
07/18/73	5050		10.9	65	F	8.2	250	--	--	--	--	0	171	--	--	--	--	--	152				
1215	5050		117	18	C	8.1	314	--	--	--	--	.00	2.80	--	--	--	--	--					
		D1 1667.50	PACHECO CREEK AT HIGHWAY 156 BRIDGE																				
05/16/73	5050		12.0	68.0F	8.4	425	34	27	24	1.4	0	222	31	26	.0	.10	--	261	197				
0800	5050		132	20.0C	8.1	487	1.70	2.22	1.04	.04	.00	3.64	.65	.73	.00	--	253	14	0.7				
		D1 2000.00	SAN BENITO RIVER AT HIGHWAY 156 BRIDGE																				
05/16/73	5050		87.0F			1250	41	83	125	5.9	0	415	227	93	26.0	1.00	--	836	446				
1315	5050		30.5C	8.1	1340	2.05	6.83	5.44	.15	.00	6.80	4.73	2.62	.42	--	--	806	104	2.6				
		D1 2450.00	SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL																				
05/16/73	5050		13.1	80.0F	8.4	1400	15	118	138	2.6	0	414	347	98	.1	1.30	--	929	524				
1225	5050		167	26.6C	8.2	1460	.75	9.70	6.00	.07	.00	6.79	7.22	2.76	.00	--	924	183	2.6				
07/18/73	5050		9.8	80	F	8.4	850	--	--	--	--	17	418	--	--	--	--	411					
1340	5050		125	27	C	8.5	876	--	--	--	--	.57	6.85	--	--	--	--						
		D2 1006.50	OLD SALINAS RIVER ABOVE TEMBLADERO SLOUGH																				
10/25/72	5050		13.7		8.4		--	--	--	--	--	--	--	--	2.8	.80	--						
	5050					2500	--	--	--	--	--	--	--	--	.05	--	--						
		D2 1006.60	HERRITT LAKE DRAIN AT PUMP																				
01/23/73	5050		7.3	45	F	6.9	2150	218	145	240	--	0	269	--	221	158	.50	--	1140				
1120	5050		60	7	C	8.1	2860	10.88	11.92	10.44	--	.00	4.41	--	6.23	2.55	--	--	920	3.1			
								33	36	31					47	19							
07/18/73	5050		9.4	64	F	8.2	1950	--	--	--	--	0	473	--	--	--	--	--	1010				
0820	5050		98	18	C	8.3	2950	--	--	--	--	.00	7.75	--	--	--	--	--					
08/14/73	5050		7.6	70	F	8.0	2890	154	138	318	7.0	0	525	758	313	--	.40	--	2080	951	4.5		
0930	5050		85	21	C	8.1	2850	7.68	11.35	13.83	.18	.00	8.60	15.78	8.83	--	--	1947	522				
								23	34	42	1				27								
		D2 1016.50	SALINAS RECLAMATION CANAL AT ALISAL STP																				
01/23/73	5050		8.2	54	F	7.6	800	61	26	85	--	0	195	--	120	31.0	.10	--	259				
1320	5050		76	12	C	8.0	982	3.04	2.14	3.70	--	.00	3.20	--	3.38	.50	--	--	99	2.3			
								34	24	42					48	7							
02/06/73	5050		7.1	57	F	7.8	420	25	9.5	46	--	0	154	--	48	11.0	.00	--	102				
1420	5050		69	14	C	7.6	519	1.25	.78	2.00	--	.00	2.52	--	1.35	.18	--	--	0	2.0			
								31	19	50					33	4							
		D2 1020.70	SALINAS RECLAMATION CANAL AT AIRPORT WAY																				
10/25/72	5050		1.0	58.1F	7.2	1120	--	--	--	--	--	--	--	--	.1	.20	--	--					
0730	5050		10	14.5C		2150	--	--	--	--	--	--	--	--	.00	--	--	--					
		D2 1030.30	BLANCO DRAIN AT PUMP LIFT																				
10/25/72	5050		9.5		8.2		--	--	--	--	--	--	--	--	39.0	1.80	--	--					
0955	5050					3840	--	--	--	--	--	--	--	--	.63	--	--	--					
01/23/73	5050		11.0	54	F	8.2	2800	54	146	535	--	0	466	--	367	133	1.30	--	737				
1240	5050		102	12	C	8.2	3700	2.69	12.01	23.27	--	.00	7.64	--	10.35	2.15	--	--	353	8.6			
								7	32	61					51	11							
02/06/73	5050		8.7	56	F	7.9	850	94	91	250	--	0	301	--	156	113	.60	--	611				
1330	5050		83	13	C	8.1	2160	4.69	7.48	10.88	--	.00	4.93	--	4.40	1.82	--	--	362	4.4			
								20	32	47					39	16							
07/18/73	5050		8.6	62	F	8.0	1350	--	--	--	--	0	375	--	--	--	--	--	549				
0730	5050		88	17	C	8.1	1950	--	--	--	--	.00	6.15	--	--	--	--	--					
08/14/73	5050		8.2	65	F	8.2	2380	96	100	268	6.0	0	428	572	192	3.6	1.00	--	1680	651	4.6		
0800	5050		87	18	C	7.9	2370	4.79	8.22	11.66	.15	.00	7.01	11.91	5.41	.06	--	1449	300				
								19	33	47	1				29	49							
		D2 1240.00	GABILAN CREEK NEAR SANTA RITA																				
02/28/73	5050					350	42	11	21	--	0	164	--	22	3.4	.00	--	--	150				
0900	5050	40			7.3	398	2.10	.90	.91	--	.00	2.69	--	.62	.05	--	--	--	16	0.7			
								54	23	23					18	1							
		D2 1255.50	ALISAL CREEK AT OLD STAGE ROAD																				
02/28/73	5050					420	39	12	36	--	0	155	--	44	6.7	.00	--	--	146				
0915	5050	8.0			7.5	465	1.95	.99	1.57	--	.00	2.54	--	1.24	.11	--	--	--	20	1.3			
								43	22	35					32	3							
		D2 1260.50	QUAIL CREEK AT OLD STAGE ROAD																				
02/28/73	5050					390	34	15	40	--	0	136	--	46	4.8	.00	--	--	146				
0935	5050	10			7.5	446	1.70	1.23	1.74	--	.00	2.23	--	1.30	.08	--	--	--	35	1.4			
								36	26	37					36	2							

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. Q DEPTH	DO SAT	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					MILLIGRAMS PER LITER					
							CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT RFACANCE VALUE					TDS SUM	TH NCH	TURB SAR				
																B	F										
02		1325.10	SALINAS RIVER NEAR GONZALES																								
10/25/72	5050		8.8	61.7F			--	--	--	--	--	--	--	1.1	.10	--											
0845	5050		90	16.5C	495									.02	--	--											
01/23/73	5050		10.7	49 F	8.0	330	48	14	28	--	0	157	--	23	3.9	.10	--							178			
1420	5050		94	9 C	8.0	490	2.40	1.15	1.22		.00	2.57		.65	.06	--								49	0.9		
							50	24	26			78		20	2												
07/17/73	5050		11.7	74 F	8.4	350	--	--	--	--	0	155	--	--	--	--	--							178			
1215	5050		137	23 C	8.1	462					.00	2.54															
02		1663.05	SAN LORENZO CREEK AT FOOTHILL LINE																								
03/07/73	5050					1800	78	76	211	--	0	272	--	82	3.9	.80	--							50R			
1220	5050	35			7.9	1810	3.89	6.25	9.18		.00	4.46		2.31	.06	--								284	4.1		
							20	32	48			65		34	1												
02		1773.20	PANCHO RICO CREEK AT SARGENTS ROAD																								
03/07/73	5050					2460	173	91	276	--	0	195	--	84	7.3	1.10	--							806			
1045	5050	20			8.1	2470	8.63	7.48	12.01		.00	3.20		2.37	.12	--								646	4.2		
							31	27	43			56		42	2												
02		1850.00	SALINAS RIVER NEAR BRADLEY																								
07/17/73	5050	4.79	14.7	70	F	8.4	220	--	--	--	0	123	--	--	--	--	--							128			
1015	5050		167	21	C	8.3	294				.00	2.02															
04		1200.00	CARMEL RIVER AT RORLES DEL RIO																								
07/17/73	5050	3.53	17.8	72	F	8.4	700	--	--	--	0	186	--	--	--	--	--							250			
1335	5050		205	22	C	8.2	731				.00	3.05															
F0 B		735.0-215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNFL)																								
10/11/72	5050		6.7	65	F	7.9	45000	--	--	--	--	--	--	18800	--	--	--							35100		2A	
0930	5050		71	18	C		48400							530.16													
11/27/72	5050		7.8	57	F	7.9	38000	--	--	--	--	--	--	17100	--	--	--							31200		3A	
1230	5050		75	14	C		43700							482.22													
12/11/72	5050		8.3	48	F	7.9	40000	--	--	--	--	--	--	19000	--	--	--							28700		3A	
1115	5050		71	9	C		42200							535.80													
01/23/73	5050		9.7	49	F	7.9	28000	--	--	--	--	--	--	10800	--	--	--							20000		2A	
1130	5050		85	9	C		29300							304.56													
02/06/73	5050		9.3	51	F	7.9	28000	--	--	--	--	--	--	10100	--	--	--							19600		4A	
1030	5050		83	11	C		28600							284.82													
03/20/73	5050		9.2	53	F	8.1	26000	--	--	--	--	--	--	8960	--	--	--							17400		19A	
0915	5050		84	12	C		26600							252.67													
04/05/73	5050		9.5	58	F	8.2	26000	--	--	--	--	--	--	9620	--	--	--							18000		7A	
0915	5050		93	14	C		27400							271.28													
05/03/73	5050		8.8	60	F	8.2	33000	--	--	--	--	--	--	11700	--	--	--							22600		15A	
0810	5050		88	16	C		36300							379.94													
06/18/73	5050		9.0	66	F	8.0	38000	--	--	--	--	--	--	14400	--	--	--							28000		2A	
1000	5050		96	19	C		41300							406.08													
07/30/73	5050		6.6	69	F	8.1	41000	--	--	--	--	--	--	15900	--	--	--							30000		2A	
0830	5050		73	21	C		44400							448.38													
08/14/73	5050		6.7	67	F	8.2	43000	--	--	--	--	--	--	16500	--	--	--							31500		3A	
0920	5050		72	19	C		43600							465.30													
09/13/73	5050		6.9	66	F	8.2	44000	--	--	--	--	--	--	16800	--	--	--							31800		1A	
0810	5050		74	19	C		46900							473.76													
F0 B		736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)																								
10/11/72	5050		7.2	65	F	7.9	45000	--	--	--	--	--	--	17800	--	--	--							35200		3A	
1100	5050		76	18	C		47500							501.96													
11/27/72	5050		8.2	57	F	8.1	40000	--	--	--	--	--	--	16900	--	--	--							31700		4A	
1330	5050		79	14	C		43600							476.58													
12/11/72	5050		9.2	45	F	8.0	41000	--	--	--	--	--	--	15900	--	--	--							28500		4A	
1200	5050		76	7	C		42300							448.38													
01/23/73	5050		9.1	49	F	7.9	32000	--	--	--	--	--	--	11700	--	--	--							22600		6A	
1220	5050		79	9	C		32600							329.94													
02/06/73	5050		9.1	51	F	7.9	28000	--	--	--	--	--	--	10000	--	--	--							19000		4A	
1100	5050		81	11	C		28100							282.00													



TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER		
						CA	MG	NA	K	CO3	PERCENT REFRACTANCE VALUE			B	F	TOS SUM	TH NCH	TURB SAR	
											HCO3	SO4	CL						NO3
E0 B 736.2 212.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662) CONTINUED																			
03/20/73 1015	5050 5050		9.6 88	53 12	F C	8.0 26000 25700	--	--	--	--	--	--	8770 247.31	--	--	17000	53A		
04/05/73 1005	5050 5050		9.6 95	59 15	F C	8.2 26000 26800	--	--	--	--	--	--	8930 251.83	--	--	17800	17A		
05/03/73 0900	5050 5050		9.0 90	60 16	F C	8.2 34000 36400	--	--	--	--	--	--	12400 349.68	--	--	23000	10A		
06/18/73 1045	5050 5050		11.1 119	66 19	F C	8.0 40000 42500	--	--	--	--	--	--	14800 417.36	--	--	28900	3A		
07/30/73 0930	5050 5050		6.3 70	70 21	F C	8.1 43000 44500	--	--	--	--	--	--	16000 451.20	--	--	30300	8A		
08/14/73 1000	5050 5050		6.1 65	66 19	F C	8.0 44000 43900	--	--	--	--	--	--	16700 470.94	--	--	32000	21A		
09/13/73 0910	5050 5050		7.0 73	64 18	F C	8.2 45000 47400	--	--	--	--	--	--	17000 479.40	--	--	32400	2A		
E0 B 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND																			
10/11/72 0850	5050 5050		7.1 73	62 17	F C	7.9 42000 45500	--	--	--	--	--	--	17200 485.04	--	--	32600	2A		
11/27/72 1100	5050 5050		8.1 77	56 13	F C	7.9 37500 40000	--	--	--	--	--	--	14500 408.90	--	--	27500	6A		
12/11/72 1000	5050 5050		8.6 74	48 9	F C	8.1 39000 40100	--	--	--	--	--	--	14600 411.72	--	--	26600	4A		
01/23/73 1000	5050 5050		9.8 84	48 9	F C	7.8 15000 16900	--	--	--	--	--	--	5400 152.28	--	--	10900	20A		
02/06/73 0840	5050 5050		9.5 84	50 10	F C	8.3 23000 23700	--	--	--	--	--	--	8090 228.14	--	--	15800	10A		
03/20/73 0730	5050 5050		9.0 82	52 11	F C	8.1 34000 36400	--	--	--	--	--	--	12100 341.22	--	--	23200	6A		
04/05/73 0800	5050 5050		9.0 85	55 13	F C	8.2 34000 37600	--	--	--	--	--	--	12400 349.68	--	--	24300	5A		
05/03/73 0645	5050 5050		8.2 78	56 13	F C	8.2 41000 45500	--	--	--	--	--	--	15300 431.46	--	--	29300	5A		
06/18/73 0845	5050 5050		8.7 91	64 18	F C	8.1 40000 45200	--	--	--	--	--	--	16000 451.20	--	--	31300	3A		
07/30/73 0700	5050 5050		6.5 67	63 17	F C	8.0 44000 47900	--	--	--	--	--	--	17900 504.78	--	--	32200	3A		
08/14/73 0755	5050 5050		6.7 69	63 17	F C	8.1 44000 48000	--	--	--	--	--	--	17500 493.50	--	--	33000	1A		
09/13/73 0640	5050 5050		7.4 76	62 17	F C	8.1 45000 47700	--	--	--	--	--	--	17000 479.40	--	--	28200	1A		
E0 B 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT																			
10/04/72 1300	5001 5001		7.5 77	63 17	F C	8.0 39300	--	--	--	0 .00	124 2.03	--	14600 411.72	--	--	2.0	34F		
11/16/72 1010	5001 5001		8.7 84	57 14	F C	7.8 29700	--	--	--	0 .00	102 1.67	--	11600 327.12	--	--	6.0	44F		
12/13/72 0930	5001 5001		10.5 88	46 8	F C	7.0 23200	--	--	--	0 .00	101 1.66	--	6500 183.30	--	--	11.4	84F		
02/14/73 1200	5001 5001		10.3 93	52 11	F C	7.8 5800	--	--	--	0 .00	87 1.43	--	1700 47.94	--	--	14.8	384F		
04/11/73 1115	5001 5050		8.5 84	59.0F 15.0C	F C	7.6 19100 22400	--	--	--	0 .00	112 1.84	--	8040 226.73	--	--	10.8	74F		
05/09/73 0925	5001 5050		8.8 87	59.0F 15.0C	F C	8.0 27500 32000	--	--	--	0 .00	119 1.95	--	12100 341.22	--	--	3.8	94F		
06/12/73 1430	5001 5050		8.4 92	68.0F 20.0C	F C	7.9 32800 37300	--	--	--	0 .00	121 1.98	--	12900 363.78	--	--	3.4	94F		

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. 0 DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER				
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	TURB SAR	
FO R 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT						CONTINUED														
07/10/73	5001		7.8		7.9 41000	--	--	--	--	0	131	--	15000	--	--	--	--	--	9AF	
1415	5050				7.9 42700					.00	2.15	--	423.00	--	--	4.2				
08/07/73	5001		8.3	68.0F	7.9 38300	--	--	--	--	0	132	--	15300	--	--	--	--	5AF		
1235	5050		91	20.0C	8.1 42500					.00	2.16	--	431.46	--	--	3.8				
09/05/73	5001		7.9	64.4F	7.9 38580	--	--	--	--	0	130	--	15100	--	--	--	--	9AF		
1135	5050		83	18.0C	8.0 42600					.00	2.13	--	425.82	--	--	3.6				
FO R 802.7 207.0 SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES																				
10/04/72	5001		8.1	64 F	8.0	--	--	--	--	--	--	--	7600	--	--	--	--	8AF		
1430	5001		85	18 C	22200								214.32	--	--	3.6				
10/18/72	5001		7.8	64 F	7.8	--	--	--	--	0	108	--	7900	--	--	--	--	5AF		
1300	5001		82	18 C	7.8 23800					.00	1.77	--	227.78	--	--	5.6				
11/07/72	5001			59.0F		--	--	3000	--	--	--	--	5630	--	--	--	10100			
1115	5050			15.0C	16600			130.50					158.77	--	--	--				
11/16/72	5001		8.4	57 F	7.7	--	--	--	--	0	99	--	7000	--	--	--	--	16AF		
1140	5001		81	14 C	7.7 20700					.00	1.62	--	197.40	--	--	9.4				
12/13/72	5001		10.3	46 F	7.9	--	--	--	--	0	95	--	5000	--	--	--	--	13AF		
1045	5001		87	8 C	7.8 17100					.00	1.56	--	141.00	--	--	15.4				
01/15/73	5001		10.5	46 F	7.3	--	--	--	--	0	80	--	2250	--	--	--	--	30AF		
1050	5001		88	8 C	7.6 7680					.00	1.31	--	63.45	--	--	16.2				
02/06/73	5001			50.0F		--	--	33	--	--	--	--	50	--	--	--	208			
1200	5050			10.0C	369			1.44					1.41	--	--	--				
02/14/73	5001		9.8	52 F	7.6	--	--	33	--	0	80	--	46	--	--	--	--	110AF		
1315	5001		89	11 C	7.7 310			1.44		.00	1.31	--	1.30	--	--	16.0				
03/15/73	5001		10.0	54 F	7.8	--	--	--	--	0	86	--	2040	--	--	--	3920	34AF		
1130	5050		92	12 C	7.5 6990					.00	1.41	--	57.53	--	--	15.4				
03/28/73	5001		10.0	53.6F	7.6 6900	--	--	--	--	0	91	--	2430	--	--	--	3810	20AF		
0940	5050		92	12.0C	7.4 6670					.00	1.49	--	68.53	--	--	16.8				
04/11/73	5001		8.8	60.8F	7.5 6900	--	--	--	--	0	98	--	2820	--	--	--	4670	38AF		
1240	5050		89	16.0C	7.4 7670					.00	1.61	--	79.52	--	--	15.6				
04/25/73	5001		9.3	60.8F	7.6 9800	--	--	--	--	0	98	--	4200	--	--	--	7180	16AF		
1005	5050		94	16.0C	7.6 11400					.00	1.61	--	118.44	--	--	13.4				
05/08/73	5001			61.7F		--	--	2560	--	--	--	--	4710	--	--	--	8920			
1130	5050			16.5C	14800			111.36					132.82	--	--	--				
05/09/73	5001		9.0	62.6F	7.9 12350	--	--	--	--	0	100	--	4670	--	--	--	8870	27AF		
1110	5050		93	17.0C	7.7 14100					.00	1.64	--	131.69	--	--	9.4				
05/30/73	5001		8.4	66.2F	7.9 17300	--	--	--	--	0	78	--	5610	--	--	--	11300	21AF		
1510	5050		90	19.0C	7.7 20900					.00	1.28	--	158.20	--	--	6.4				
06/12/73	5001		8.2	69.8F	7.9 18000	--	--	--	--	0	102	--	6900	--	--	--	13000	8AF		
1600	5050		91	21.0C	7.9 17000					.00	1.67	--	194.58	--	--	6.7				
06/27/73	5001		7.8	71.6F	7.9 21500	--	--	--	--	0	103	--	7890	--	--	--	15200	13AF		
1410	5050		89	22.0C	7.9 14600					.00	1.69	--	222.50	--	--	7.0				
07/11/73	5001		8.5	69.8F	8.1 22740	--	--	--	--	0	108	--	8780	--	--	--	16900	18AF		
1355	5050		95	21.0C	8.0 24200					.00	1.77	--	247.60	--	--	4.6				
08/07/73	5001			68.0F		--	--	4250	--	--	--	--	8050	--	--	--	15500			
1130	5050			20.0C	23300			184.88					227.01	--	--	--				
08/07/73	5001		8.9	68.0F	8.1 23200	--	--	--	--	0	108	--	8780	--	--	--	15900	18AF		
1410	5050		97	20.0C	8.1 24500					.00	1.77	--	247.60	--	--	4.2				
08/22/73	5001		8.4	66.2F	7.9 21320	--	--	--	--	0	103	--	7490	--	--	--	14200	14AF		
1100	5050		90	19.0C	7.9 22500					.00	1.69	--	211.22	--	--	4.6				
08/28/73	5001			66.2F		--	--	2800	--	--	--	--	5180	--	--	--	9970			
1145	5050			19.0C	15700			121.80					146.08	--	--	--				
09/05/73	5001		8.1	64.4F	8.0 21840	--	--	--	--	0	103	--	7660	--	--	--	15300	11AF		
1305	5050		85	18.0C	8.1 22900					.00	1.69	--	216.01	--	--	5.0				
09/19/73	5001		8.0	66.2F	8.0 14850	--	--	--	--	0	98	--	5760	--	--	--	10800	15AF		
0935	5050		86	19.0C	7.9 17600					.00	1.61	--	162.43	--	--	7.0				



TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER		
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM
E0 B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND																	
10/04/72 1530	5001 5001		9.1 97	66 19	F C	8.1 3480	--	--	--	--	--	--	920 25.94	--	--	11.2	40AF
10/18/72 1420	5001 5001		8.3 87	64 18	F C	7.7 5750	--	--	--	0 .00	82 1.34	--	1500 42.30	--	--	11.6	29AF
11/15/72 1110	5001 5001		9.7 92	55 13	F C	7.7 2500	--	--	--	0 .00	72 1.18	--	680 19.18	--	--	15.6	34AF
12/12/72 0910	5001 5001		11.6 95	45 7	F C	7.7 429	--	--	--	0 .00	74 1.21	--	80 2.26	--	--	19.8	21AF
01/15/73 1200	5001 5001		10.6 89	46 8	F C	7.0 175	--	--	--	0 .00	58 .95	--	14 .39	--	--	15.6	80AF
02/13/73 1240	5001 5001		10.0 90	52 11	F C	7.8 205	--	--	--	0 .00	73 1.20	--	15 .42	--	--	16.0	110AF
03/15/73 1245	5001 5050		10.5 97	54 12	F C	8.0 254	--	--	--	0 .00	83 1.36	--	20 .56	--	--	17.6	154 37AF
03/28/73 1100	5001 5050		10.5 97	53.6 12.0C	F C	7.6 246	--	--	--	0 .00	83 1.36	--	20 .56	--	--	17.6	152 40AF
04/11/73 1345	5001 5050		9.4 95	60.8 16.0C	F C	7.5 352	--	--	--	0 .00	93 1.52	--	34 .96	--	--	18.2	186 32AF
04/25/73 1200	5001 5050		10.2 103	60.8 16.0C	F C	8.2 416	--	--	--	0 .00	89 1.46	--	56 1.58	--	--	16.6	232 32AF
05/09/73 1225	5001 5050		9.3 98	64.4 18.0C	F C	8.1 2140	--	--	--	0 .00	85 1.39	--	696 19.63	--	--	12.6	1190 33AF
05/30/73 1640	5001 5050		9.0 100	69.8 21.0C	F C	7.8 2550	--	--	--	4.0 .13	70 1.15	--	701 19.77	--	--	15.6	1410 48AF
06/12/73 1710	5001 5050		8.5 96	71.6 22.0C	F C	7.9 2790	--	--	--	0 .00	82 1.34	--	911 25.69	--	--	15.0	1660 45AF
06/27/73 1530	5001 5050		8.7 101	73.4 23.0C	F C	8.0 6630	--	--	--	0 .00	82 1.34	--	1960 55.27	--	--	13.4	4090 31AF
07/11/73 1530	5001 5050		9.0 104	73.4 23.0C	F C	8.1 8800	--	--	--	0 .00	87 1.43	--	2660 75.01	--	--	10.4	5480 48AF
07/31/73 1340	5001 5001		8.6 103	77 25	F C	7.8 370	--	--	--	0 .00	73 1.20	--	--	--	--	12.4	18A
08/07/73 1525	5001 5050		9.4 103	68.0 20.0C	F C	9.3 8830	--	--	--	0 .00	85 1.39	--	2710 76.42	--	--	9.2	5110 37AF
08/22/73 1220	5001 5050		8.6 94	68.0 20.0C	F C	7.9 7460	--	--	--	0 .00	86 1.41	--	2190 61.76	--	--	10.4	4200 60AF
09/05/73 1425	5001 5050		8.6 92	66.2 19.0C	F C	8.1 6050	--	--	--	0 .00	85 1.39	--	1780 50.20	--	--	12.4	3530 38AF
09/19/73 1050	5001 5050		8.0 87	68.0 20.0C	F C	8.1 2110	--	--	--	0 .00	86 1.41	--	537 15.14	--	--	16.0	1120 50AF
E0 B 803.5 201.4 SUISUN BAY NEAR PORT CHICAGO																	
11/07/72 1040	5001 5050		59.0 15.0C		F C	9320	--	--	1620 70.47	--	--	--	2980 84.04	--	--	--	5400
02/06/73 1100	5001 5050		50.0 10.0C		F C	287	--	--	23 1.00	--	--	--	33 .93	--	--	--	171
05/08/73 1100	5001 5050		66.2 19.0C		F C	11400	--	--	2030 88.31	--	--	--	3540 99.83	--	--	--	6580
08/07/73 1100	5001 5050		69.8 21.0C		F C	15100	--	--	2540 110.49	--	--	--	4820 135.92	--	--	--	9100
E0 B 803.5 217.0 SAN PABLO BAY NEAR ROOEO																	
10/04/72 1350	5001 5001		7.7 82	66 19	F C	8.0 31800	--	--	--	0 .00	930 15.24	--	11200 315.84	--	--	2.6	6AF
11/16/72 1055	5001 5001		8.4 81	57 14	F C	7.8 24900	--	--	--	0 .00	101 1.66	--	8300 234.06	--	--	8.2	10AF

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER		
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH
FO R 803.5 217.0 SAN PABLO BAY NEAR ROEOO						CONTINUED												
12/13/72	5001		10.7	46	F 7.9	--	--	--	--	0	100	--	6000	--	--	--	--	12AF
1005	5001		90	8	C 7.9	21100				.00	1.64		169.20				11.6	
02/14/73	5001		10.0	52	F 7.6	--	--	--	--	0	86	--	1600	--	--	--	--	50AF
1230	5001		90	11	C 7.7	5000				.00	1.41		45.12				15.4	
04/11/73	5001		8.8	60.8F	7.6	15200	--	--	--	0	106	--	6640	--	--	--	11700	10AF
1150	5050		89	16.0C	7.3	17600				.00	1.74		187.25				12.2	
05/09/73	5001		8.8	60.8F	8.0	20700	--	--	--	0	112	--	7870	--	--	--	15600	16AF
1010	5050		89	16.0C	7.6	23800				.00	1.84		221.93				6.0	
06/12/73	5001		8.2	68.0F	7.9	27800	--	--	--	0	112	--	10600	--	--	--	19900	26AF
1510	5050		90	20.0C	7.8	21800				.00	1.84		298.92				4.3	
07/11/73	5001		7.7	68.0F	7.9	31920	--	--	--	0	121	--	11600	--	--	--	24000	31AF
1305	5050		84	20.0C	7.9	35200				.00	1.98		327.12				4.4	
08/07/73	5001		8.0	66.2F	7.9	33400	--	--	--	0	124	--	12600	--	--	--	24600	17AF
1310	5050		86	19.0C	8.1	37200				.00	2.03		355.32				4.4	
09/05/73	5001		64.4F	7.8	32500	--	--	--	--	0	121	--	12300	--	--	--	23800	29AF
1210	5050		18.0C	7.9	36300					.00	1.98		346.86				4.4	
FO R 803.6 159.3 SUISUN BAY OFF MIDDLE POINT																		
10/18/72	5001		8.2	64	F 7.7	--	--	--	--	--	--	--	2600	--	--	--	--	25AF
1350	5001		86	18	C	13300							73.32				9.6	
11/16/72	5001		9.0	57	F 7.6	--	--	--	--	--	--	--	2600	--	--	--	--	25AF
1235	5001		87	14	C	8320							73.32				13.4	
12/13/72	5001		11.8	45	F 7.9	--	--	--	--	--	--	--	650	--	--	--	--	23AF
1125	5001		97	7	C	2490							14.33				18.6	
01/15/73	5001		11.0	46	F 7.0	--	--	--	--	0	67	--	27	--	--	--	--	40AF
1140	5001		93	8	C 7.5	260				.00	1.10		.76				17.2	
02/14/73	5001		9.9	50	F 7.6	--	--	--	--	0	77	--	30	--	--	--	--	80AF
1425	5001		87	10	C 7.6	280				.00	1.26		.85				17.0	
03/28/73	5001		10.4	53.6F	7.7	305	--	--	--	0	84	--	24	--	--	--	--	33AF
1030	5050		96	12.0C	7.7	279				.00	1.38		.68				19.8	
04/25/73	5001		10.6	62.6F	8.4	1480	--	--	--	0	89	--	243	--	--	--	--	15AF
1130	5050		109	17.0C	7.9	1060				.00	1.46		6.85				16.4	
05/30/73	5001		9.1	69.8F	8.0	6000	--	--	--	5.0	73	--	2070	--	--	--	--	46AF
1615	5050		101	21.0C	8.5	6310				.17	1.20		58.37				12.4	
06/27/73	5001		8.6	73.4F	8.0	9200	--	--	--	0	86	--	2940	--	--	--	--	24AF
1505	5050		99	23.0C	7.5	9200				.00	1.41		82.91				12.0	
08/22/73	5001		9.2	68.0F	7.4	8640	--	--	--	0	87	--	2990	--	--	--	--	45AF
1150	5050		101	20.0C	8.0	9820				.00	1.43		84.32				8.6	
09/19/73	5001		8.1	66.2F	8.2	3950	--	--	--	0	88	--	1140	--	--	--	--	45AF
1025	5050		87	19.0C	8.0	4090				.00	1.44		32.15				14.2	
FO R 804.0 203.0 SUISUN BAY NEAR PRESTON POINT																		
10/18/72	5001		8.0	64	F 7.8	--	--	--	--	--	--	--	4100	--	--	--	--	22AF
1330	5001		84	18	C	9070							115.62				7.8	
11/16/72	5001		9.0	55	F 7.7	--	--	--	--	--	--	--	3200	--	--	--	--	25AF
1215	5001		85	13	C	9780							90.24				12.8	
12/13/72	5001		11.2	45	F 7.9	--	--	--	--	--	--	--	2400	--	--	--	--	18AF
1110	5001		92	7	C	7750							67.68				16.8	
01/15/73	5001		11.0	46	F 7.2	--	--	--	--	0	74	--	540	--	--	--	--	40AF
1120	5001		93	8	C 7.7	2000				.00	1.21		15.23				17.8	
03/15/73	5001		10.2	54	F 7.9	--	--	--	--	0	82	--	258	--	--	--	644	40AF
1200	5050		94	12	C 7.5	1150				.00	1.34		7.28				.2	
03/28/73	5001		10.7	53.6F	7.9	690	--	--	--	0	85	--	155	--	--	--	389	33A
1005	5050		99	12.0C	7.8	739				.00	1.39		4.37				18.4	
04/11/73	5001		9.4	60.8F	7.6	1750	--	--	--	0	95	--	494	--	--	--	1100	39AF
1305	5050		95	16.0C	7.6	1960				.00	1.56		13.93				17.6	



TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY		MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER					
					PH	EC	CA	MG	NA	K	CO3	HCO3	PERCENT RF	ACTANCE VALUE	CL	NO3	B	F	TDS SUM	TH NCH	TURB SAR	
FO R 804.0 203.0 SUISUN BAY NEAR PRESTON POINT																			CONTINUED			
04/25/73	5001		9.0	60.8F	8.0	6300	--	--	--	--	0	95	--	2340	--	--	--	4300	26AF			
1045	5050		91	16.0C	7.8	7160					.00	1.56	--	65.99	--	--	14.6					
		3																				
05/09/73	5001		9.2	62.6F	8.0	7640	--	--	--	--	0	95	--	2880	--	--	--	5320	46AF			
1140	5050		95	17.0C	7.7	8860					.00	1.56	--	81.22	--	--	11.2					
		3																				
05/30/73	5001		9.3	68.0F	8.1	8900	--	--	--	--	4.0	80	--	3080	--	--	--	5540	66AF			
1545	5050		102	20.0C	8.4	9580					.13	1.31	--	86.86	--	--	10.0					
		3																				
06/12/73	5001		8.4	69.8F	7.9	11250	--	--	--	--	0	93	--	4480	--	--	--	7420	37AF			
1625	5050		94	21.0C	7.9	10200					.00	1.52	--	126.34	--	--	9.1					
		3																				
06/27/73	5001		8.5	71.6F	7.9	16250	--	--	--	--	0	96	--	5790	--	--	--	11200	25AF			
1440	5050		96	22.0C	7.6	14500					.00	1.57	--	163.28	--	--	8.6					
		3																				
07/11/73	5001		9.5	71.6F	8.3	17240	--	--	--	--	0	100	--	7100	--	--	--	12200	33AF			
1420	5050		108	22.0C	8.2	18300					.00	1.64	--	200.22	--	--	5.2					
		3																				
08/07/73	5001		10.0	68.0F	8.4	16400	--	--	--	--	0	96	--	5980	--	--	--	10900	33AF			
1440	5050		109	20.0C	8.2	17500					.00	1.57	--	168.64	--	--	4.4					
		3																				
08/22/73	5001		8.8	68.0F	8.0	14080	--	--	--	--	0	95	--	5460	--	--	--	10100	31AF			
1130	5050		96	20.0C	7.9	16200					.00	1.56	--	153.97	--	--	5.6					
		3																				
09/05/73	5001		8.4	64.4F	8.1	12600	--	--	--	--	0	92	--	4240	--	--	--	8440	45AF			
1330	5050		88	18.0C	8.3	13400					.00	1.51	--	119.57	--	--	7.2					
		3																				
09/19/73	5001		7.5	66.2F	8.1	12120	--	--	--	--	0	93	--	4390	--	--	--	7470	50AF			
1000	5050		80	19.0C	7.9	12700					.00	1.52	--	123.80	--	--	8.0					
		3																				
FO R 804.4 156.2 HONKER BAY NEAR WHEELER POINT																						
10/03/72	5001		8.7	66.2F	8.0		--	--	--	--	--	--	--	840	--	--	--		65AF			
1340	5001		93	19.0C		3040								23.69			12.0					
		3																				
10/18/72	5001		7.9	64 F	7.6		--	--	--	--	0	84	--	1600	--	--	--		30AF			
1410	5001		83	18 C	7.6	5700					.00	1.38	--	45.12	--	--	11.4					
		3																				
11/15/72	5001		9.5	55 F	7.7		--	--	--	--	0	73	--	1120	--	--	--		31AF			
1055	5001		90	13 C	7.6	2860					.00	1.20	--	31.58	--	--	15.0					
		3																				
12/12/72	5001		11.6	43 F	7.8		--	--	--	--	0	74	--	50	--	--	--		21AF			
0845	5001		93	6 C	7.7	349					.00	1.21	--	1.41	--	--	20.0					
		3																				
02/13/73	5001		10.0	52 F	8.0		--	--	--	--	0	72	--	11	--	--	--		110AF			
1210	5001		90	11 C	7.5	178					.00	1.18	--	.31	--	--	15.8					
		3																				
03/15/73	5001		10.8	52 F	8.0		--	--	--	--	0	89	--	14	--	--	--		50AF			
1230	5050		98	11 C	7.5	230					.00	1.46	--	.39	--	--	17.6					
		3																				
03/29/73	5001		10.3	53.6F	7.7	252	--	--	--	--	0	86	--	16	--	--	--		27AF			
1050	5050		95	12.0C	7.8	236					.00	1.41	--	.45	--	--	17.4					
		3																				
04/12/73	5001		9.5	59.0F	7.6	403	--	--	--	--	0	92	--	40	--	--	--		33AF			
1130	5050		94	15.0C	7.6	372					.00	1.51	--	1.13	--	--	18.2					
		3																				
04/26/73	5001		10.6	62.6F	8.3	2220	--	--	--	--	0	89	--	484	--	--	--		22AF			
1020	5050		109	17.0C	7.8	1950					.00	1.46	--	13.65	--	--	15.8					
		3																				
05/10/73	5001		9.0	64.4F	8.0	2480	--	--	--	--	0	85	--	762	--	--	--		45AF			
1020	5050		95	18.0C	7.7	2700					.00	1.39	--	21.49	--	--	12.2					
		3																				
05/31/73	5001		8.6	68.0F	7.7	2180	--	--	--	--	13	55	--	534	--	--	--		68AF			
1455	5050		94	20.0C	8.9	1890					.43	.90	--	15.06	--	--	16.2					
		3																				
06/13/73	5001		8.2	69.8F	7.8	3300	--	--	--	--	0	85	--	839	--	--	--		75AF			
1545	5050		91	21.0C	7.9	3160					.00	1.39	--	23.66	--	--	15.8					
		3																				
06/26/73	5001		7.8	73.4F	7.8	6700	--	--	--	--	0	84	--	1990	--	--	--		45AF			
1330	5050		90	23.0C	8.0	6810					.00	1.38	--	56.12	--	--	13.8					
		3																				
07/11/73	5001		8.7	71.6F	8.2	9680	--	--	--	--	0	88	--	3250	--	--	--		80AF			
1505	5050		99	22.0C	8.0	10300					.00	1.44	--	91.65	--	--	9.0					
		3																				
08/08/73	5001		9.3	68.0F	8.2	8430	--	--	--	--	0	84	--	3270	--	--	--		90AF			
1350	5050		102	20.0C	8.0	9850					.00	1.38	--	92.21	--	--	8.0					
		3																				
08/23/73	5001		8.6	69.8F	7.7	7420	--	--	--	--	0	84	--	2640	--	--	--		100AF			
1300	5050		96	21.0C	7.7	8680					.00	1.38	--	74.45	--	--	9.6					
		3																				
09/06/73	5001			66.2F	8.0	5830	--	--	--	--	0	83	--	1860	--	--	--		55AF			
1305	5050			19.0C	8.2	5860					.00	1.36	--	52.45	--	--	12.6					
		3																				

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER				MILLIGRAMS PER LITER			
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT VALUE	B	F	TDS SUM	TH NCH
FO B 804.4 156.2 HONKER RAY NEAR WHEELER POINT						CONTINUED													
09/20/73	5001		7.9	68.0F	8.0	2220	--	--	--	--	0	86	--	659	--	--	--	--	60AF
1050	5050		86	20.0C	7.8	2310					.00	1.41	--	18.58	--	--	16.0		
FO B 805.3 226.3 SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER																			
10/04/72	5001		7.7	64 F	7.9		--	--	--	--	0	116	--	12600	--	--	--	--	7AF
1225	5001		81	18 C	8.1	34400					.00	1.90	--	355.32	--	--	.8		
11/16/72	5001		9.1	54 F	7.6		--	--	--	--	0	103	--	9400	--	--	--	--	
0940			84	12 C	7.8						.00	1.69	--	265.08	--	--	--		
12/13/72	5001		12.1	39 F	7.9		--	--	--	--	0	98	--	6500	--	--	--	28AF	
0905	5001		92	4 C	7.8	22200					.00	1.61	--	183.30	--	--	11.4		
02/14/73	5001		10.7	52 F	7.9		--	--	--	--	0	82	--	2000	--	--	--	50AF	
1135	5001		97	11 C	7.8	6500					.00	1.34	--	56.40	--	--	15.8		
04/11/73	5001		11.2	62.6F	7.9	18200	--	--	--	--	0	106	--	7790	--	--	--	26AF	
1010	5050		115	17.0C	7.4	20500					.00	1.74	--	219.68	--	--	--		
05/09/73	5001		10.1	60.8F	8.3	26500	--	--	--	--	0	117	--	11700	--	--	--	21AF	
0845	5050		102	16.0C	7.6	30700					.00	1.92	--	329.94	--	--	4.0		
06/12/73	5001		8.1	69.8F	7.9	27800	--	--	--	--	0	112	--	11400	--	--	--	60AF	
1350	5050		90	21.0C	7.7	31400					.00	1.84	--	321.48	--	--	1.2		
07/10/73	5001		7.8	69.8F	8.0	36000	--	--	--	--	0	124	--	12600	--	--	--	78AF	
1325	5050		87	21.0C	7.8	37900					.00	2.03	--	355.32	--	--	5.2		
08/07/73	5001		8.0	68.0F	7.7	33500	--	--	--	--	0	129	--	11700	--	--	--	20AF	
1200	5050		87	20.0C	7.7	39500					.00	2.11	--	386.34	--	--	5.0		
09/05/73	5001		7.5	64.4F	7.8	34700	--	--	--	--	0	123	--	12900	--	--	--	65AF	
1050	5050		79	18.0C	7.8	38400					.00	2.02	--	363.78	--	--	4.8		
FO B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH																			
10/03/72	5001		8.7	65.3F	8.0		--	--	--	--	--	--	--	2400	--	--	--	--	50AF
1300	5001		92	18.5C		7940							--	67.68	--	--	6.6		
10/18/72	5001		8.0	64 F	7.5		--	--	--	--	0	90	--	2800	--	--	--	27AF	
1215	5050		84	18 C	7.3	10800					.00	1.48	--	78.96	--	--	9.2		
11/15/72	5001		9.2	57 F	7.1		--	--	--	--	0	79	--	1900	--	--	--	45AF	
1010	5001		89	14 C	7.6	6780					.00	1.29	--	53.58	--	--	13.4		
12/12/72	5001		11.0	43 F	7.1		--	--	--	--	0	77	--	700	--	--	--	38AF	
0800	5001		88	6 C	7.7	2840					.00	1.26	--	19.74	--	--	18.0		
02/13/73	5001		10.4	52 F	7.4		--	--	--	--	0	76	--	23	--	--	--	100AF	
1130	5001		94	11 C	7.8	180					.00	1.25	--	.65	--	--	15.8		
03/15/73	5001		10.7	52 F	7.5		--	--	--	--	0	83	--	17	--	--	147	50AF	
1005	5050		97	11 C	7.6	222					.00	1.36	--	.48	--	--	17.4		
03/29/73	5001		10.1	53.6F	7.7	320	--	--	--	--	0	86	--	29	--	--	175	55AF	
1000	5050		93	12.0C	7.6	292					.00	1.41	--	.82	--	--	17.4		
04/12/73	5001		9.4	60.8F	7.7	1210	--	--	--	--	0	93	--	240	--	--	605	55AF	
1040	5050		95	16.0C	7.6	1120					.00	1.52	--	6.77	--	--	17.8		
04/26/73	5001		9.9	62.6F	8.0	4920	--	--	--	--	0	95	--	1830	--	--	3230	26AF	
0940	5050		102	17.0C	7.7	5450					.00	1.56	--	51.61	--	--	14.6		
05/10/73	5001		8.9	62.6F	8.0	5400	--	--	--	--	0	89	--	1710	--	--	3360	50AF	
0935	5050		92	17.0C	7.7	5820					.00	1.46	--	48.22	--	--	11.4		
05/31/73	5001		8.8	68.0F	7.9	7600	--	--	--	--	0	82	--	2560	--	--	4610	76AF	
1415	5050		96	20.0C	7.7	8130					.00	1.34	--	72.19	--	--	10.4		
06/13/73	5001		8.1	68.0F	7.8	7330	--	--	--	--	0	90	--	2310	--	--	4910	37AF	
1345	5050		88	20.0C	7.9	8000					.00	1.48	--	65.14	--	--	11.5		
06/27/73	5001		9.3	73.4F	7.6	12600	--	--	--	--	0	83	--	4480	--	--	8300	37AF	
1330	5050		108	23.0C	7.5	13100					.00	1.36	--	126.34	--	--	9.6		
08/08/73	5001		9.4	66.2F	8.0	13600	--	--	--	--	0	92	--	5050	--	--	9430	80AF	
1145	5050		101	19.0C	8.0	15200					.00	1.51	--	142.41	--	--	4.2		
08/22/73	5001		9.1	66.2F	8.0	11360	--	--	--	--	0	89	--	3890	--	--	7350	39AF	
1000	5050		97	19.0C	8.0	12600					.00	1.46	--	109.70	--	--	6.6		



TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. 0 DEPTH	DO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER				
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS	TH	TURB
E0 B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH						CONTINUED													
09/06/73	5001		6.8	64.4F	8.0	9040	--	--	--	--	0	86	--	2800	--	--	5520		45AF
1050	5050	3	71	18.0C	8.0	9340					.00	1.41		78.96		9.6			
09/19/73	5001		8.3	66.2F	7.9	6348	--	--	--	--	0	89	--	2050	--	--	3880		50AF
0850	5050	3	89	19.0C	7.9	7090					.00	1.46		57.81		11.0			
E0 S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS																			
10/13/72	5001		5.6	64 F	7.0		--	--	--	--	--	--	--	2000	--	--			18AF
0850	5001	3	59	18 C		6940								56.40		8.2			
11/14/72	5001		7.1	52 F	7.1	5250	--	--	--	--	--	--	--	1200	--	--			34AF
0940	5001	3	64	11 C		4350								33.84		10.4			
12/14/72	5001		11.0	39 F	6.8		--	--	--	--	--	--	--	630	--	--			50AF
0935	5001	3	84	4 C		2490								17.77		18.2			
01/29/73	5001		9.3	46 F	7.0		--	--	--	--	--	--	--	220	--	--			80AF
1010	5001	3	78	8 C		998								6.20		14.6			
02/26/73	5001		7.9	55 F	7.4		--	--	--	--	--	--	--	210	--	--			70AF
1045	5001	3	75	13 C		1020								5.92		18.0			
03/27/73	5001		8.2	55 F	7.2	1780	--	--	--	--	0	114	--	418	--	--			40AF
0920	5050	3	78	13 C	7.3	1810					.00	1.87		11.79		16.4			
04/26/73	5001		8.1	66 F	7.7	1290	--	--	--	--	0	100	--	310	--	--			75AF
0905	5050	3	87	19 C	7.8	1330					.00	1.64		8.74		15.6			
05/24/73	5001		8.3	66 F	7.9	5800	--	--	--	--	0	97	--	2130	--	--			42AF
0920	5050	3	89	19 C	7.8	6530					.00	1.59		60.07		7.4			
06/25/73	5001		6.9	75 F	7.5	6600	--	--	--	--	0	96	--	2140	--	--			44AF
1125	5050	3	81	24 C	7.8	6730					.00	1.57		60.35		8.0			
07/23/73	5001		7.8	66 F	7.9	12980	--	--	--	--	0	100	--	4430	--	--			33AF
0940	5050	3	84	19 C	7.9	13600					.00	1.64		124.93		1.4			
08/20/73	5001		4.0	68.0F	6.8	11600	--	--	--	--	0	91	--	4300	--	--			55AF
0845	5050	3	44	20.0C	7.8	13200					.00	1.49		121.26		2.4			
09/18/73	5001		7.3	66 F	7.9	9600	--	--	--	--	0	96	--	3060	--	--			62AF
0940	5050	3	78	19 C	7.9	9730					.00	1.57		86.29		5.6			
E0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND																			
10/13/72	5001		6.6	66 F	7.5		--	--	--	--	--	--	--	2300	--	--			27AF
1125	5050	2	71	19 C		7630								64.86		4.8			
11/14/72	5001		8.1	54 F	7.4	8020	--	--	--	--	--	--	--	2150	--	--			70AF
1330	5050	3	75	12 C		7270								60.63		9.6			
12/14/72	5001		9.2	39 F	7.0		--	--	--	--	--	--	--	1180	--	--			45AF
1245	5001	2	70	4 C		4180								33.28		15.2			
02/13/73	5001		9.1	52 F	6.8		--	--	--	--	0	102	--	200	--	--			65AF
1040	5001	3	82	11 C	7.7	945					.00	1.67		5.64		15.2			
02/26/73	5001		7.4	55 F	7.5		--	--	--	--	--	--	--	120	--	--			80AF
1415	5001	3	70	13 C		1090								3.38		16.8			
03/27/73	5001		8.4	57 F	7.3	1720	--	--	--	--	0	162	--	384	--	--	935		32AF
1305	5050	3	81	14 C	7.4	1750					.00	2.66		10.83		16.2			
04/12/73	5001		8.0	62.6F	7.4	1330	--	--	--	--	0	114	--	297	--	--	763		75AF
0950	5050	3	82	17.0C	7.7	1310					.00	1.87		8.38		15.4			
04/26/73	5001		8.8	68 F	8.1	1660	--	--	--	--	0	142	--	382	--	--	957		60AF
1310	5050	3	96	20 C	7.8	1690					.00	2.33		10.77		13.2			
05/10/73	5001		7.4	64.4F	7.7	3700	--	--	--	--	0	114	--	1170	--	--	2320		70AF
0845	5050	3	78	18.0C	7.7	4050					.00	1.87		32.99		10.2			
05/24/73	5001		8.8	66 F	8.3	3880	--	--	--	--	0	148	--	1360	--	--	2400		60AF
1340	5050	3	94	19 C	8.0	4250					.00	2.43		38.35		2.4			
06/13/73	5001		7.4	69.8F	7.7	4700	--	--	--	--	0	122	--	1540	--	--	2890		75AF
1230	5050	3	82	21.0C	7.9	4540					.00	2.00		43.43		5.8			
06/25/73	5001		8.8	75 F	7.9	5900	--	--	--	--	0	127	--	1780	--	--	3170		38AF
1455	5050	3	104	24 C	7.9	5380					.00	2.08		50.20		4.2			

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. DEPTH	OO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN						MILLIGRAMS PER LITER					MILLIGRAMS PER LITER		
						CA	MG	NA	K	CO3	HCO3	CO4	CL	NO3	PERCENT REACTANCE VALUE		TDS SUM	TH NCH	TURB SAR
															8	F			
E0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND CONTINUED																			
07/23/73	5001		10.3	68	F	8.1	9259	--	--	--	--	0	138	--	3150	--	--	5870	27AF
1345	5050		113	20	C	8.1	10100	--	--	--	--	.00	2.26	--	88.83	--	2.6		
08/08/73	5001		8.3	68.0F	7.4	10700	--	--	--	--	0	110	--	4500	--	--	8000	60AF	
1030	5050		91	20.0C	8.1	12600	--	--	--	--	.00	1.80	--	126.90	--	.6			
08/08/73	5001			68.0F	7.5	11000	--	--	--	--	--	--	--	--	--	--	--	70AF	
1031	5001	30		20.0C															
08/20/73	5001		7.4	68.0F	7.8	10500	--	--	--	--	0	128	--	3550	--	--	6660	32AF	
1300	5050		81	20.0C	8.1	11300	--	--	--	--	.00	2.10	--	100.11	--	.6			
09/06/73	5001		6.9	66.2F	7.7	11200	--	--	--	--	0	101	--	4000	--	--	7080	30AF	
1140	5050		74	19.0C	8.2	11700	--	--	--	--	.00	1.66	--	112.80	--	1.8			
09/06/73	5001			68.0F	7.7	11150	--	--	--	--	--	--	--	--	--	--	--	40AF	
1141	5001	28		20.0C															
09/18/73	5001		8.0	68	F	8.1	10000	--	--	--	--	0	119	--	3460	--	--	33AF	
1235	5050		87	20	C	8.0	10200	--	--	--	--	.00	1.95	--	97.57	--	2.0		
E0 S 811.0 204.8 CHADBOURNE SLOUGH AT CHADBOURNE ROAD																			
10/13/72	5001		6.0	64	F	7.3		--	--	--	--	--	--	--	2100	--	--	22AF	
0955	5001		63	18	C		7460	--	--	--	--	--	--	--	59.22	--	5.6		
11/14/72	5001		8.5	52	F	7.1	800	--	--	--	--	--	--	--	83	--	--	950AF	
1230	5001		77	11	C		466	--	--	--	--	--	--	--	2.34	--	16.4		
12/14/72	5001		9.8	39	F	7.0		--	--	--	--	--	--	--	1150	--	--	40AF	
1120	5001		74	4	C		4080	--	--	--	--	--	--	--	32.43	--	16.2		
01/29/73	5001		8.5	46	F			--	--	--	--	--	--	--	290	--	--	60AF	
1150	5001		72	8	C		1400	--	--	--	--	--	--	--	8.18	--	14.4		
02/26/73	5001		9.0	55	F	7.3		--	--	--	--	--	--	--	140	--	--	21AF	
1300	5001		85	13	C		949	--	--	--	--	--	--	--	3.95	--	28.0		
03/27/73	5001		8.9	59	F	7.3	1320	--	--	--	--	0	171	--	242	--	--	30AF	
1135	5050		88	15	C	7.4	1340	--	--	--	--	.00	2.80	--	6.82	--	26.4		
04/26/73	5001		8.9	72	F	8.1	1520	--	--	--	--	0	148	--	346	--	--	50AF	
1155	5050		101	22	C	7.8	1550	--	--	--	--	.00	2.43	--	9.76	--	14.0		
05/24/73	5001		7.6	68	F	7.8	3900	--	--	--	--	0	144	--	1330	--	--	60AF	
1140	5050		83	20	C	8.0	4290	--	--	--	--	.00	2.36	--	37.51	--	11.6		
06/25/73	5001		7.9	73	F	7.6	6500	--	--	--	--	0	108	--	2150	--	--	37AF	
1320	5050		91	23	C	7.8	6300	--	--	--	--	.00	1.77	--	60.63	--	6.0		
06/25/73	5001		8.1	72	F	8.0	4600	--	--	--	--	0	149	--	1270	--	--	34AF	
1545	5050		92	22	C	8.2	4330	--	--	--	--	.00	2.44	--	35.81	--	10.0		
07/23/73	5001		8.2	68	F	7.7	8928	--	--	--	--	0	129	--	2990	--	--	32AF	
1215	5050		90	20	C	8.0	10200	--	--	--	--	.00	2.11	--	84.32	--	4.8		
08/20/73	5001		6.7	66.2F	7.3	10300	--	--	--	--	0	95	--	4110	--	--	40AF		
1130	5050		72	19.0C	7.7	12800	--	--	--	--	.00	1.56	--	115.90	--	1.6			
09/18/73	5001			64	F	7.6	10000	--	--	--	--	0	100	--	3310	--	--	30AF	
1125	5050		18	C	7.7	9730	--	--	--	--	.00	1.64	--	93.34	--	4.2			
E0 S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD																			
10/13/72	5001		6.9	64	F	7.5		--	--	--	--	--	--	--	2100	--	--	17AF	
1230	5001		72	18	C		7140	--	--	--	--	--	--	--	59.22	--	5.4		
11/14/72	5001		8.4	55	F	7.4		--	--	--	--	--	--	--	2100	--	--	25AF	
1435	5001		79	13	C		7270	--	--	--	--	--	--	--	59.22	--	9.8		
12/14/72	5001		10.2	39	F	6.7		--	--	--	--	--	--	--	1300	--	--	30AF	
1330	5001		78	4	C		4490	--	--	--	--	--	--	--	36.66	--	14.6		
01/29/73	5001		9.8	46	F			--	--	--	--	--	--	--	260	--	--	75AF	
1335	5001		83	8	C		1070	--	--	--	--	--	--	--	7.33	--	14.8		
02/26/73	5001		9.4	55	F	7.4		--	--	--	--	--	--	--	100	--	--	55AF	
1520	5001		89	13	C		632	--	--	--	--	--	--	--	2.82	--	18.2		
03/27/73	5001		9.5	55	F	7.1	950	--	--	--	--	0	95	--	199	--	--	27AF	
1405	5050		90	13	C	7.3	962	--	--	--	--	.00	1.56	--	5.61	--	16.2		





TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	OO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER				
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	TURB SAR	PERCENT REACTANCE VALUE					
																				8	5102				
E3 1250.00 NAPA RIVER NEAR NAPA																									
10/12/72	5050	3.01	8.9	64	F 7.7	380	28	24	24	--	0	208	--	21	--	--	--	--	170	5A					
1440	5050		93	18	C 8.1	441	1.40	2.00	1.04	--	.00	3.41	--	.59	--	--	--	0	0.8						
							32	45	23																
11/15/72	5050	5.02	10.0	55	F 7.2	200	14	9.2	12	--	0	75	--	10	--	--	--	73	45A						
1145	5050		94	13	C 7.7	207	.70	.76	.52	--	.00	1.23	--	.28	--	--	--	12	0.6						
							35	38	26																
12/21/72	5050	4.72	10.1	54	F 7.3	220	16	11	13	--	0	85	--	12	--	--	--	87	20A						
1100	5050		94	12	C 7.7	221	.80	.94	.57	--	.00	1.39	--	.34	--	--	--	18	0.6						
							35	41	25																
02/16/73	5050	6.47	10.9	52	F 7.3	185	13	11	8.9	--	0	85	--	8.5	--	--	--	78	30A						
1345	5050		99	11	C 7.7	197	.65	.91	.39	--	.00	1.39	--	.24	--	--	--	9	0.4						
							33	47	20																
04/11/73	5050	3.61	10.2	64	F 7.6	270	20	18	15	--	0	138	--	9.3	--	--	--	124	3A						
1115	5050		107	18	C 7.7	304	1.00	1.48	.65	--	.00	2.26	--	.26	--	--	--	11	0.6						
							32	47	21																
06/14/73	5050	2.87	15.7	69	F 8.2	320	28	24	20	--	2.0	187	--	15	--	--	--	197	170	4A					
1230	5050		174	21	C 8.4	424	1.40	2.00	.87	--	.07	3.06	--	.42	--	--	--	14	0.7						
							33	47	20																
08/17/73	5050	2.64	11.1	70	F 7.9	360	28	26	23	1.6	4.0	202	30	17	1.4	.40	--	255	177	0A					
1200	5050		124	21	C 8.4	431	1.40	2.14	1.00	.04	.13	3.31	.62	.48	.02	--	--	231	5	0.8					
							31	47	22	1	3	73	14	11											
E3 2100.51 GREEN VALLEY CREEK AT CORDELIA																									
10/13/72	5001		7.7	59	F 8.1		--	--	--	--	--	--	--	31	--	--	--			4AF					
0930	5001		76	15	C	424								.87			16.8								
11/14/72	5001		9.6	55	F 7.6		--	--	--	--	--	--	--	13	--	--	--			65AF					
1115	5001		91	13	C	178								.37			34.8								
12/14/72	5001		13.1	37	F 7.7		--	--	--	--	--	--	--	19	--	--	--			4AF					
1045	5001		97	3	C	347								.54			32.4								
01/29/73	5001		11.1	48	F		--	--	--	--	--	--	--	20	--	--	--			28AF					
1110	5001		96	9	C	323								.56			41.4								
02/26/73	5001		9.9	55	F 7.5		--	--	--	--	--	--	--	24	--	--	--			140AF					
1200	5001		94	13	C	428								.68			35.6								
03/27/73	5001		12.2	57	F 7.7		--	--	--	--	--	--	--	--	--	--	--								
1105	5001		118	14	C																				
05/24/73	5001		10.8	66	F 8.7	330	--	--	--	--	--	--	--	--	--	--	--								
1105	5001		116	19	C																				
06/25/73	5001		10.5	72	F 8.7	353	--	--	--	--	11	157	--	--	--	--	--								
1250	5001		119	22	C						.37	2.57													
07/23/73	5001		11.2	66	F 8.6	305	--	--	--	--	--	--	--	--	--	--	--								
1140	5001		120	19	C																				
F4 L 748.1 215.6 LAKE MERRITT AT BOATHOUSE DOCK																									
12/11/72	5050		12.1	44	F 8.9	13000	87	286	2500	60	0	110	598	4460	.8	1.20	--	7940	1400	11A					
1345	5050		99	7	C 7.1	13300	4.34	23.52	108.75	1.53	.00	1.80	12.45	125.77	.01	--	--	8047	1304	29.1					
							3	17	79	1		1	9	90											
03/20/73	5050		9.3	56	F 9.0	6000	62	124	1040	31	0	122	268	1860	--	.50	--	3710	666	1A					
1150	5050		89	13	C 7.6	6480	3.09	10.20	45.24	.79	.00	2.00	5.58	52.45	--	--	--	3445	565	17.5					
							5	17	76	1		3	9	87											
06/18/73	5050		10.0	71	F 8.5	37000	299	1011	7580	200	0	133	2080	13800	--	.30	--	28000	4910	0A					
1230	5050		113	22	C 7.5	41200	14.92	83.14	329.73	5.12	.00	2.18	43.31	389.16	--	--	--	25036	4798	47.1					
							3	19	76	1		1	10	90											
09/13/73	5050		6.8	68	F 8.5	42000	331	1130	9240	280	0	134	2240	16800	--	4.00	--	31600	5470	2A					
1020	5050		74	20	C 7.5	45200	16.52	92.93	401.94	7.16	.00	2.20	46.64	473.76	--	--	--	30091	5367	54.3					
							3	18	78	1			9	91											
F5 1423.01 ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE																									
11/15/72	5050		10.5	54.0	F 8.7	360	32	19	15	1.8	0	148	41	8.9	6.0	.40	--	226	160	37A					
1105	5050		100	12.2	C 7.5	372	1.60	1.56	.65	.05	.00	2.43	.85	.25	.10	--	--	197	37	0.5					
							41	40	17	1		67	23	7	3										
03/27/73	5050		10.9	60	F 8.7	450	--	--	--	--	--	--	--	--	--	--	--			212	0A				
1345	5050		111	16	C	466																			
04/06/73	5050		56	F 8.9	500	--	--	--	--	--	--	--	--	--	--	--	--			252	0A				
1630	5050		13	C	531																				
04/13/73	5050		10.9	60.0	F 8.4	540	--	--	--	--	--	--	--	--	--	--	--			245	0A				
1330	5050		111	15.5	C	564																			
04/18/73	5050		11.2	58.0	F 8.9	580	53	33	20	1.4	0	278	62	13	.5	.20	--	305	269	1A					
1100	5050		112	14.4	C 8.0	582	2.64	2.71	.87	.04	.00	4.56	1.29	.37	.01	--	--	320	40	0.5					
							42	43	14	1		73	21	6											
04/27/73	5050		8.5	74.0	F 8.5	575	--	--	--	--	--	--	--	--	--	--	--			264	0A				
1620	5050		101	23.3	C	589																			



TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	OO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN MILLIEQUIVALENTS PER LITER										MILLIGRAMS PER LITER				
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS	TH	TURB	
						PERCENT REACTANCE VALUE										PER LITER				
E5 1423.01						ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE										CONTINUED				
05/04/73	5050		10.3	64.0F	8.8	600	--	--	--	--	--	--	--	--	--	--	--	--	274	0A
1445	5050		110	17.8C		613														
05/09/73	5050		11.5	72.0F	8.6	550	--	--	--	--	--	--	--	--	--	--	--	--	263	0A
1135	5050		134	22.2C		606														
05/16/73	5050		14.0	70 F	8.7	580	47	35	24	1.8	0	277	72	15	2.4	.30	--	308	263	1A
1015	5050		160	21 C	8.0	616	2.35	2.88	1.04	.05	.00	4.54	1.50	.42	.04	--	334	35	0.6	
F8 2100.00						NAVARRO RIVER NEAR NAVARRO														
11/16/72	5050	4.97	10.2	50.9F	7.4	155	--	--	7.9	--	0	77	--	5.1	--	.10	--	65	230A	
0900	5050	1060	91	10.5C	7.5	163			.34		.00	1.26		.14					0.4	
01/19/73	5050	18.88	10.9	48.2F	7.2	110	--	--	--	--	--	--	--	--	--	--	--		340AF	
0900	5050	12000	94	9.0C																
03/08/73	5050	6.11	10.3	48.2F	7.2	146	--	--	--	--	--	--	--	--	--	--	--		55AF	
0840	5050	1650	89	9.0C																
05/24/73	5050	1.72	9.4	60.8F	7.3	254	--	--	--	--	--	--	--	--	--	--	--		0AF	
0725	5050	61	95	16.0C																
07/12/73	5050	1.45	8.2	60.8F	7.3	266	--	--	--	--	--	--	--	--	--	--	--		1AF	
0750	5050	16	83	16.0C																
09/14/73	5050	1.39	8.8	59.9F	7.2	228	--	--	13	--	0	141	--	9.8	--	.20	--	110	0A	
0815	5050	9.0	88	15.5C	7.9	264			.57		.00	2.31		.28					0.5	
F8 2720.00						BIG RIVER NEAR MENDOCINO														
11/15/72	5050	8.27	10.1	50.9F	7.2	161	--	--	9.4	--	0	88	--	5.1	--	.20	--	66	21A	
1545	5050		90	10.5C	7.8	177			.41		.00	1.44		.14					0.5	
01/18/73	5050		10.3	50.0F	7.0	80	--	--	--	--	--	--	--	--	--	--	--		325AF	
1630	5050	800E	91	10.0C																
03/07/73	5050		10.0	48.2F	7.2	121	--	--	7.2	--	0	59	--	5.9	--	.00	--	45	18A	
1515	5050	400E	86	9.0C	7.7	122			.31		.00	.97		.17					0.5	
05/24/73	5050		8.6	60.8F	7.3	194	--	--	--	--	--	--	--	--	--	--	--		0AF	
0810	5050	30	87	16.0C																
07/11/73	5050	6.76	9.4	68.0F	7.4	207	--	--	--	--	--	--	--	--	--	--	--		1AF	
1415	5050	20	103	20.0C																
09/13/73	5050		10.5	60.8F	7.2	174	--	--	12	--	0	106	--	8.6	--	.40	--	78	0A	
1505	5050	15E	106	16.0C	7.7	203			.52		.00	1.74		.24					0.6	
F8 3100.00						NOYO RIVER NEAR FORT BRAGG														
11/15/72	5050		10.4	50.0F	7.2	134	--	--	10	--	0	65	--	7.9	--	.10	--	48	21A	
1445	5050	167	92	10.0C	7.4	141			.44		.00	1.07		.22					0.6	
01/18/73	5050		10.8	51.8F	7.0	78	--	--	--	--	--	--	--	--	--	--	--		182AF	
1530	5050	650	98	11.0C																
03/07/73	5050		10.6	48.2F	7.2	105	--	--	--	--	--	--	--	--	--	--	--		11AF	
1415	5050	500	91	9.0C																
05/23/73	5050		9.7	59.0F	7.5	127	--	--	--	--	--	--	--	--	--	--	--		1AF	
1010	5050	42	96	15.0C																
07/11/73	5050		10.4	66.2F	7.4	164	--	--	--	--	--	--	--	--	--	--	--		1AF	
1255	5050	11	111	19.0C																
09/13/73	5050		10.2	57.2F	7.1	141	--	--	9.7	--	0	68	--	20	--	.10	--	51	0A	
1215	5050	5.0	99	14.0C	7.6	150			.42		.00	1.11		.56					0.6	
F9 1100.00						RUSSIAN RIVER NEAR GUERNEVILLE														
10/12/72	5050	5.55	7.8	63 F	7.3	220	--	--	--	--	--	--	--	--	--	--	--			
1200	5050		81	17 C																
11/15/72	5050	12.31	8.0	53 F	7.2	175	15	7.9	8.6	--	0	77	--	7.8	--	--	--	70	84A	
1430	5050		73	12 C	7.7	186	.75	.65	.37		.00	1.26		.22				7	0.4	
12/21/72	5050	11.78	9.5	53 F	7.2	182	--	--	--	--	--	--	--	--	--	--	--			
1430	5050		87	12 C																
01/18/73	5050	33.10	10.4	50 F	7.3	99	8.8	6.1	4.1	--	0	51	--	5.4	--	--	--	47	750A	
1130	5050		92	10 C	7.3	107	.44	.50	.18		.00	.84		.15				5	0.3	
							.39	.45	.16											

TABLE D-2 (CONTINUED)  
MINERAL ANALYSES OF SURFACE WATER

DATE TIME	SAMPLER LAB	G.H. O DEPTH	OO SAT	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					MILLIGRAMS PER LITER				
						MILLIEQUIVALENTS PER LITER										PERCENT REFRACTANCE VALUE					B	F	TDS SUM	TH NCH	TURB SAR
						CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT	REFRACTANCE	VALUE	SI02	SUM	NCH					
		F9	1100.00	RUSSIAN RIVER NEAR GUERNEVILLE										CONTINUED											
02/16/73 1030	5050	15.72	10.6 92	49 9	F C	7.3 170	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
03/14/73 1130	5050 5050	10.13	10.7 95	50 10	F C	7.3 218 8.0 236	18 .90 37	14 1.18 48	8.4 .37 15	--	0 .00	121 1.98	--	7.0 .20	--	--	--	--	--	--	--	104 5	244 0.4		
04/11/73 1330	5050	7.27	10.3 108	64 18	F C	7.6 275	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
05/10/73 1300	5050	5.69	10.6 116	68 20	F C	7.9 260	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
06/14/73 0945	5050		10.2 113	69 21	F C	7.8 275	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
07/12/73 1230	5050		9.5 113	76 24	F C	8.2 240	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
08/17/73 0900	5050 5050	4.74	8.0 88	69 21	F C	7.8 235 8.1 258	24 1.20 44	13 1.07 39	9.4 .41 15	1.2 .03 1	0 -00	138 2.26 82	12 .25 9	7.6 .21 8	1.4 .02 1	.30	--	146 137	--	113 1	2A 0.4				
09/12/73 1030	5050 5050	4.80	8.2 91	69 21	F C	7.8 210 8.1 266	23 1.15 40	14 1.19 42	12 .52 18	--	0 -00	143 2.34	--	7.4 .21	--	.40	--	143	--	117 0	2A 0.5				



TABLE D-3

MINOR ELEMENT ANALYSIS OF SURFACE WATER

Sampler and Lab Agency Codes

- 5001 - U. S. Bureau of Reclamation
- 5006 - McClellan Air Force Base Laboratory
- 5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
- DISCH - Instantaneous discharge in cubic feet per second
- EC - Electrical conductance in micromhos at 25° Celsius
- TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
- PH - Measure of acidity (<7) or alkalinity (>7) of water
- CHROM (ALL) - All chromium
- CHROM (HEX) - Hexavalent chromium
- D - Dissolved
- T - Total

TABLE D-3 (CONTINUED)  
MINOR ELEMENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	DEPTH	DISCH EC	TEMP PH	ARSENIC	CONSTITUENTS IN MILLIGRAMS PER LITER		CHROM (ALL) CHROM (HEX)	COPPER IRON	LEAD MANGANESE	MERCURY SELENIUM	SILVER ZINC		
		D1	1075.30	PAJARO RIVER AT THURWACHTER ROAD										
10/25/72	5050			24.5C		--	--			0.00	D	0.0	T	--
	5050			8.4	0.00	D	0.00	D	--	--	--	--	--	--
		D2	1006.50	OLD SALINAS RIVER ABOVE TEMBLADERO SLOUGH										
10/25/72	5050			8.4	0.00	D	0.00	D	--	0.00	D	0.0	T	--
	5050								--	--	--	--	--	--
		D2	1020.70	SALINAS RECLAMATION CANAL AT AIRPORT WAY										
10/25/72	5050			14.5C		--	--			0.00	D	0.0	T	--
0730	5050		1120	7.2	0.00	D	0.00	D	--	--	--	--	--	--
		D2	1030.30	BLANCO DRAIN AT PUMP LIFT										
10/25/72	5050			8.2	0.00	D	0.00	D	--	0.00	D	0.0	T	--
0955	5050								--	--	--	--	--	--
		D2	1325.10	SALINAS RIVER NEAR GONZALES										
10/25/72	5050			16.5C		--	--			0.00	D	0.0	T	--
0845	5050				0.00	D	0.00	D	--	--	--	--	--	--
		E0 B	801.8 222.3	SAN PABLO BAY NEAR PINOLE POINT										
11/16/72	5001			14 C		--	--			--	--	--	--	--
1010	5006	3		7.8	--	--	--	0.0	D	0.0	D	--	--	--
05/09/73	5001			15.0C		--	--	0.00	D	0.0	D	0.010	D	--
0925	5006	3	27500	8.0	--	--	0.00	D	0.0	D	0.0	D	--	0.0
		E0 B	802.7 207.0	SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES										
05/09/73	5001			17.0C		--	--	0.00	D	0.0	D	0.00	D	--
1110	5006	3	12350	7.9	--	--	0.00	D	0.0	D	0.0	D	--	0.0
		E0 B	802.8 155.0	SACRAMENTO RIVER AT CHIPPS ISLAND										
11/15/72	5001			13 C		--	--			--	--	--	--	--
1110	5006	3		7.7	--	--	--	0.0	D	0.0	D	--	--	--
01/15/73	5001			8 C		--	--	0.00	D	0.012	D	0.00	D	--
1200	5006	3		7.0	--	--	0.00	D	0.110	D	0.0	D	--	0.010
05/09/73	5001			18.0C		--	--	0.00	D	0.0	D	0.00	D	--
1225	5006	3	1930	8.1	--	--	0.00	D	0.0	D	0.0	D	--	0.0
		E0 B	803.5 217.0	SAN PABLO BAY NEAR RODEO										
05/09/73	5001			16.0C		--	--	0.00	D	0.0	D	0.00	D	--
1010	5006	3	20700	8.0	--	--	0.00	D	0.0	D	0.0	D	--	0.0
		E0 B	804.0 203.0	SUISUN BAY NEAR PRESTON POINT										
11/16/72	5001			13 C		--	--			--	--	--	--	--
1215	5006	3		7.7	--	--	--	0.0	D	0.0	D	--	--	--
01/15/73	5001			8 C		--	--	0.00	D	0.020	D	0.00	D	--
1120	5006	3		7.2	--	--	0.00	D	0.180	D	0.0	D	--	0.040
05/09/73	5001			17.0C		--	--	0.00	D	0.0	D	0.00	D	--
1140	5006	3	7640	8.0	--	--	0.00	D	0.0	D	0.0	D	--	0.0
		E0 B	807.0 202.3	GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH										
11/15/72	5001			14 C		--	--			--	--	--	--	--
1010	5006	3		7.1	--	--	--	0.0	D	0.0	D	--	--	--
05/10/73	5001			17.0C		--	--	0.00	D	0.0	D	0.00	D	--
0935	5006	3	5400	8.0	--	--	0.00	D	0.0	D	0.0	D	--	0.0
		E5	1423.01	ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE										
11/15/72	5050		50	54.0F		--	--			--	--	--	--	--
1105	5050		360	8.7	--	--	--			0.92	T	--	--	--
03/27/73	5050			60 F		--	--			--	--	--	--	--
1345	5050		450	8.7	--	--	--			0.01	T	--	--	--
04/06/73	5050			56 F		--	--			--	--	--	--	--
1630	5050		500	8.9	--	--	--			0.01	T	--	--	--
04/13/73	5050			60.0F		--	--			--	--	--	--	--
1330	5050		540	8.4	--	--	--			0.01	T	--	--	--
04/18/73	5050			58.0F		--	--			--	--	--	--	--
1100	5050		580	8.9	--	--	--			0.01	T	--	--	--
04/27/73	5050			74.0F		--	--			--	--	--	--	--
1620	5050		575	8.5	--	--	--			0.00	T	--	--	--
05/04/73	5050			64.0F		--	--			--	--	--	--	--
1445	5050		600	8.8	--	--	--			0.00	T	--	--	--
05/09/73	5050			72.0F		--	--			--	--	--	--	--
1135	5050		550	8.6	--	--	--			0.00	T	--	--	--
05/16/73	5050			70 F		--	--			--	--	--	--	--
1015	5050		580	8.7	--	--	--			0.00	T	--	--	--



TABLE D-4

MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

Sampler and Lab Agency Codes

5001 - U. S. Bureau of Reclamation  
 5050 - Department of Water Resources  
 5063 - Santa Cruz County Health Department

Abbreviations and Constituents

TIME - Pacific Standard Time on a 24-hour clock  
 TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) or Celsius (C)  
 EC - Electrical conductance in micromhos at 25° Celsius  
 DO - Dissolved oxygen content in milligrams per liter  
 G.H. - Instantaneous gage height in feet above an established datum  
 PH - Measure of acidity (<7) or alkalinity (>7) of water: F - Field; L - Lab  
 DISCH - Instantaneous discharge in cubic feet per second  
 MBAS - Methylene blue active substance (a test for detergent surfactants) in milligrams per liter: L - Linear alkylate sulfonate; A - Alkyl benzene sulfonate  
 DEPTH - Depth in feet at which sample was collected  
 TURB - Jackson Turbidity Units  
 T+L - Tannin and lignin as tannic acid in milligrams per liter  
 CHLOR - Field determination of residual chlorine in milligrams per liter  
 O+G - Oil and grease in milligrams per liter  
 COLOR - True color in color units  
 SET S - Settleable solids in milliliters per liter (ML/L) and milligrams per liter (MG/L): F - Field; L - Lab  
 BOD - Biochemical oxygen demand in milligrams per liter: A - 4 days; B - 5 days; C - 6 days; D - 7 days; E - 100 days; F - other  
 SUS S - Suspended solids in milligrams per liter: 5 - at 105°C; 8 - at 108°C  
 COD - Chemical oxygen demand in milligrams per liter  
 V SUS S - Volatile suspended solids in milligrams per liter  
 CYANIDE - Cyanide in milligrams per liter  
 PHENOLS - Phenols in milligrams per liter  
 TOC - Total organic carbon in milligrams per liter  
 DOC - Dissolved organic carbon in milligrams per liter  
 IODIDE - Iodide in milligrams per liter  
 T ODOR - Threshold odor number at 60°C  
 BROMIDE - Bromide in milligrams per liter  
 SULFITE - Sulfite in milligrams per liter  
 T SULF - Total sulfides in milligrams per liter  
 D SULF - Dissolved sulfides in milligrams per liter  
 CC EXT - Carbon chloroform extract  
 CA EXT - Carbon alcohol extract

TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.M.	F-PH L-PH	DISCH MGAS	DEPTH TURB	T-L CHLOR	SET 5		BOD SUS 5	COD V SUS 5	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
								O-G COLOR	ML/L MG/L								
		D0 1100.00		BRANCIFORTE CREEK AT SANTA CRUZ													
03/19/73	5063	50.0F	10.0	7.2				--	--	--	--	--	--	--	--	--	--
1415	5050	300			0.0	A		--	--	27	5	--	--	--	--	--	--
09/27/73	5050	62 F	9.7	7.7	1 E			--	--	--	--	--	--	--	--	--	--
1330	5050	450		8.3	0.0	A		--	--	26	5	--	--	--	--	--	--
		D0 1180.01		SAN LORENZO RIVER AT PARADISE PARK													
03/19/73	5063	50.0F	11.0	7.5				--	--	--	--	--	--	--	--	--	--
1000	5050	335			0.0	A		--	--	10	5	--	--	--	--	--	--
09/27/73	5050	57 F	10.2	7.7				--	--	--	--	--	--	--	--	--	--
1000	5050	330		8.3	0.0	A		--	--	22	5	--	--	--	--	--	--
		D0 1220.01		ZAYANTE CREEK AT FELTON													
03/19/73	5063	49.0F	11.5	7.4				--	--	--	--	--	--	--	--	--	--
1115	5050	415			0.0	A		--	--	43	5	--	--	--	--	--	--
09/27/73	5050	56 F	10.9	7.7				--	--	--	--	--	--	--	--	--	--
1115	5050	330		8.1	0.0	A		--	--	4	5	--	--	--	--	--	--
		D0 1498.01		SAN LORENZO RIVER AT BOULDER CREEK													
03/19/73	5063	48.0F	11.5	7.2				--	--	--	--	--	--	--	--	--	--
1200	5050	195			0.0	A		--	--	6	5	--	--	--	--	--	--
09/27/73	5050	58 F	9.6	7.7	5 E			--	--	--	--	--	--	--	--	--	--
1150	5050	440		8.2	0.0	A		--	--	22	5	--	--	--	--	--	--
		D0 2020.00		APTOS CREEK BELOW VALENCIA CREEK													
03/19/73	5063	48 F	10.5	7.7				--	--	--	--	--	--	--	--	--	--
1330	5050	440			0.0	A		--	--	239	5	--	--	--	--	--	--
09/27/73	5050	60 F	9.6	8.0	1 E			--	--	--	--	--	--	--	--	--	--
1400	5050	670		8.5	0.0	A		--	--	20	5	--	--	--	--	--	--
		D0 3100.00		SOQUEL CREEK AT SOQUEL													
03/19/73	5063	49.0F	10.5	7.8				--	--	--	--	--	--	--	--	--	--
1300	5050	530			0.0	A		--	--	42	5	--	--	--	--	--	--
09/27/73	5050	72 F	10.4	8.0				--	--	--	--	--	--	--	--	--	--
1330	5050	650	2.72	8.3	0.0	A		--	--	36	5	--	--	--	--	--	--
		D0 4010.01		SCOTT CREEK AT HIGHWAY 1													
03/19/73	5063	50.0F	11.0	6.8				--	--	--	--	--	--	--	--	--	--
0930	5050	225			0.0	A		--	--	2	5	--	--	--	--	--	--
09/27/73	5050	61 F	10.4	7.3	2 E			--	--	--	--	--	--	--	--	--	--
1530	5050	370		8.3	0.0	A		--	--	2	5	--	--	--	--	--	--
		D1 1250.00		PAJARO RIVER AT CHITTENDEN													
07/18/73	5050	65 F	10.4	8.4				--	--	--	--	--	--	--	--	--	--
0945	5050	1400	1.00		--			--	--	45	5	--	--	--	--	--	--
		D1 1371.50		UVAS CREEK NR MORGAN HILL BL UVAS DAM													
07/18/73	5050	65 F	10.9	8.2				--	--	--	--	--	--	--	--	--	--
1215	5050	250			--			--	--	5	5	--	--	--	--	--	--
		D1 2450.00		SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL													
07/18/73	5050	80 F	9.8	8.4				--	--	--	--	--	--	--	--	--	--
1340	5050	850			--			--	--	32	5	--	--	--	--	--	--
		D2 1006.60		MERRITT LAKE DRAIN AT PUMP													
07/18/73	5050	64 F	9.4	8.2				--	--	--	--	--	--	--	--	--	--
0820	5050	1950			--			--	--	71	5	--	--	--	--	--	--
		D2 1030.30		BLANCO DRAIN AT PUMP LIFT													
07/18/73	5050	62 F	8.6	8.0				--	--	--	--	--	--	--	--	--	--
0730	5050	1350			--			--	--	27	5	--	--	--	--	--	--
		D2 1325.10		SALINAS RIVER NEAR GONZALES													
07/17/73	5050	74 F	11.7	8.4				--	--	--	--	--	--	--	--	--	--
1215	5050	350			--			--	--	111	5	--	--	--	--	--	--
		D2 1850.00		SALINAS RIVER NEAR BRADLEY													
07/17/73	5050	70 F	14.7	8.4				--	--	--	--	--	--	--	--	--	--
1015	5050	220	4.79		--			--	--	13	5	--	--	--	--	--	--
		D4 1200.00		CARMEL RIVER AT ROBLES DEL RIO													
07/17/73	5050	72 F	17.8	8.4				--	--	--	--	--	--	--	--	--	--
1335	5050	700	3.53		--			--	--	6	5	--	--	--	--	--	--
		E0 B 735.0 215.0		SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)													
10/11/72	5050	65 F	6.7	7.9				--	--	--	--	--	--	--	--	--	--
0930	5050	45000			--			--	--	6	5	--	--	--	--	--	--
11/27/72	5050	57 F	7.8	7.9				--	--	--	--	--	--	--	--	--	--
1230	5050	38000			--			--	--	18	5	--	--	--	--	--	--
12/11/72	5050	48 F	8.3	7.9				--	--	--	--	--	--	--	--	--	--
1115	5050	40000			--			--	--	6	5	--	--	--	--	--	--
01/23/73	5050	49 F	9.7	7.9				--	--	--	--	--	--	--	--	--	--
1130	5050	28000			--			--	--	2	5	--	--	--	--	--	--
02/06/73	5050	51 F	9.3	7.9				--	--	--	--	--	--	--	--	--	--
1030	5050	28000			--			--	--	14	5	--	--	--	--	--	--



TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET 5 ML/L	BOD SUS 5	COD V SUS 5	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOOR	BROMIDE SULFITE	T SULF O SULF	CC EXT CA EXT
E0 B 735.0 215.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL) CONTINUED																	
03/20/73 0915	5050 5050	53 F 26000	9.2	8.1	--	--	--	--	--	43	5	--	--	--	--	--	--
04/05/73 0915	5050 5050	58 F 26000	9.5	8.2	--	--	--	--	--	28	5	--	--	--	--	--	--
05/03/73 0810	5050 5050	60 F 33000	8.8	8.2	--	--	--	--	--	45	5	--	--	--	--	--	--
06/18/73 1000	5050 5050	66 F 38000	9.0	8.0	--	--	--	--	--	1	5	--	--	--	--	--	--
09/13/73 0810	5050 5050	66 F 44000	6.9	8.2	--	--	--	--	--	40	5	--	--	--	--	--	--
E0 B 736.2 212.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)																	
10/11/72 1100	5050 5050	65 F 45000	7.2	7.9	--	--	--	--	--	10	5	--	--	--	--	--	--
11/27/72 1330	5050 5050	57 F 40000	8.2	8.1	--	--	--	--	--	21	5	--	--	--	--	--	--
12/11/72 1200	5050 5050	45 F 41000	9.2	8.0	--	--	--	--	--	4	5	--	--	--	--	--	--
01/23/73 1220	5050 5050	49 F 32000	9.1	7.9	--	--	--	--	--	36	5	--	--	--	--	--	--
02/06/73 1100	5050 5050	51 F 28000	9.1	7.9	--	--	--	--	--	21	5	--	--	--	--	--	--
03/20/73 1015	5050 5050	53 F 26000	9.6	8.0	--	--	--	--	--	140	5	--	--	--	--	--	--
04/05/73 1005	5050 5050	59 F 26000	9.6	8.2	--	--	--	--	--	43	5	--	--	--	--	--	--
05/03/73 0900	5050 5050	60 F 34000	9.0	8.2	--	--	--	--	--	28	5	--	--	--	--	--	--
06/18/73 1045	5050 5050	66 F 40000	11.1	8.0	--	--	--	--	--	5	5	--	--	--	--	--	--
09/13/73 0910	5050 5050	64 F 45000	7.0	8.2	--	--	--	--	--	20	5	--	--	--	--	--	--
E0 B 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND																	
10/11/72 0850	5050 5050	62 F 42000	7.1	7.9	--	--	--	--	--	9	5	--	--	--	--	--	--
11/27/72 1100	5050 5050	56 F 37500	8.1	7.9	--	--	--	--	--	23	5	--	--	--	--	--	--
12/11/72 1000	5050 5050	48 F 39000	8.6	8.1	--	--	--	--	--	30	5	--	--	--	--	--	--
01/23/73 1000	5050 5050	48 F 15000	9.8	7.8	--	--	--	--	--	231	5	--	--	--	--	--	--
02/06/73 0840	5050 5050	50 F 23000	9.5	8.3	--	--	--	--	--	31	5	--	--	--	--	--	--
03/20/73 0730	5050 5050	52 F 34000	9.0	8.1	--	--	--	--	--	19	5	--	--	--	--	--	--
04/05/73 0800	5050 5050	55 F 34000	9.0	8.2	--	--	--	--	--	20	5	--	--	--	--	--	--
05/03/73 0645	5050 5050	56 F 41000	8.2	8.2	--	--	--	--	--	21	5	--	--	--	--	--	--
06/18/73 0845	5050 5050	64 F 40000	8.7	8.1	--	--	--	--	--	4	5	--	--	--	--	--	--
09/13/73 0640	5050 5050	62 F 45000	7.4	8.1	--	--	--	--	--	13	5	--	--	--	--	--	--
E0 B 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT																	
10/04/72 1300	5001 5050	17 C 22600	7.5	8.0 8.0	--	3	--	--	--	15	5	5	--	--	--	--	--
11/16/72 1010	5001 5050	14 C 30500	8.7	7.8 7.8	--	3	--	--	--	9	5	5	--	--	--	--	--
02/14/73 1200	5001 5050	11 C 33000	10.3	7.8 7.8	--	3	--	--	--	36	5	18	--	--	--	--	--
04/11/73 1115	5001 5050	15.0C 19100	8.5	7.6 7.9	--	3	--	--	--	14	5	4	--	--	--	--	--
04/25/73 0840	5001 5050	22600			--	3	--	--	--	7	5	3	--	--	--	--	--
04/25/73 0841	5001 5050	30500			--	15	--	--	--	11	5	2	--	--	--	--	--
04/25/73 0842	5001 5050	33000			--	25	--	--	--	19	5	2	--	--	--	--	--

TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	SET 5		BOD SUS 5	COD V SUS 5	CYANIDE PHENOLS	TOC DOC	IOOIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
								O+G COLOR	ML/L MG/L								
EO B 801.8 222.3		SAN PABLO BAY NEAR PINOLE POINT										CONTINUED					
04/25/73 0843	5001 5050	35700			--	39	--	--	--	15	5	3	--	--	--	--	--
05/09/73 0925	5001 5050	15.0C 27500	8.8	8.0 7.6	--	3	--	--	--	19	5	1	--	--	--	--	--
06/12/73 1430	5001 5050	20.0C 32800	8.4	7.9 7.8	--	3	--	--	--	12	5	3	--	--	--	--	--
06/12/73 1431	5001 5050	19.0C 35000			--	43	--	--	--	28	5	5	--	--	--	--	--
07/10/73 1415	5001 5050	41000	7.8	7.9 7.9	--	3	--	--	--	12	5	0	--	--	--	--	--
07/10/73 1416	5001 5050	41050			--		--	--	--	31	5	6	--	--	--	--	--
08/07/73 1235	5001 5050	20.0C 38300	8.3	7.9 8.1	--	3	--	--	--	6	5	1	--	--	--	--	--
08/07/73 1236	5001 5050	19.0C 46000			--	35	--	--	--	8	5	0	--	--	--	--	--
09/05/73 1135	5001 5050	18.0C 38580	7.9	7.9 8.0	--	3	--	--	--	12	5	3	--	--	--	--	--
09/05/73 1136	5001 5050	18.0C 39400	7.8	7.9	--	39	--	--	--	10	5	3	--	--	--	--	--
EO B 802.7 207.0		SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES															
10/04/72 1430	5001 5050	18 C	8.1	8.0	--	3	--	--	--	14	5	4	--	--	--	--	--
10/18/72 1300	5001 5050	18 C	7.8	7.8 7.8	--	3	--	--	--	17	5	2	--	--	--	--	--
11/16/72 1140	5001 5050	14 C	8.4	7.7 7.7	--	3	--	--	--	27	5	6	--	--	--	--	--
02/14/73 1315	5001 5050	11 C	9.8	7.6 7.7	--	3	--	--	--	160	5	22	--	--	--	--	--
03/15/73 1130	5001 5050	12 C	10.0	7.8 7.5	--	3	--	--	--	47	5	10	--	--	--	--	--
03/28/73 0940	5001 5050	12.0C 6900	10.0	7.6 7.4	--	3	--	--	--	24	5	7	--	--	--	--	--
04/11/73 1240	5001 5050	16.0C 6900	8.8	7.5 7.4	--	3	--	--	--	2.8 R 53	5	6	--	--	--	--	--
04/25/73 1005	5001 5050	16.0C 9800	9.3	7.6 7.6	--	3	--	--	--	31	5	6	--	--	--	--	--
04/25/73 1006	5001 5050				--	15	--	--	--	35	5	6	--	--	--	--	--
04/25/73 1007	5001 5050				--	27	--	--	--	120	5	24	--	--	--	--	--
05/09/73 1110	5001 5050	17.0C 12350	9.0	7.9 7.7	--	3	--	--	--	1.2 R 37	5	8	--	--	--	--	--
05/30/73 1510	5001 5050	19.0C 17300	8.4	7.9 7.7	--	3	--	--	--	48	5	8	--	--	--	--	--
06/12/73 1600	5001 5050	21.0C 18000	8.2	7.9 7.9	--	3	--	--	--	1.2 R 15	5	5	--	--	--	--	--
06/12/73 1601	5001 5050	20.0C 21100			--	32	--	--	--	44	5	5	--	--	--	--	--
06/27/73 1410	5001 5050	22.0C 21500	7.8	7.9 7.9	--	3	--	--	--	18	5	5	--	--	--	--	--
06/27/73 1411	5001 5050	24000			--	33	--	--	--	89	5	13	--	--	--	--	--
07/11/73 1355	5001 5050	21.0C 22740	8.5	8.1 8.0	--	3	--	--	--	1.4 R 38	5	6	--	--	--	--	--
07/11/73 1356	5001 5050	25300			--	35	--	--	--	111	5	14	--	--	--	--	--
08/07/73 1410	5001 5050	20.0C 23200	8.9	8.1 8.1	--	3	--	--	--	1.2 R 20	5	4	--	--	--	--	--
08/07/73 1411	5001 5050	20.0C 26700			--	31	--	--	--	23	5	2	--	--	--	--	--
08/22/73 1100	5001 5050	19.0C 21320	8.4	7.9 7.9	--	3	--	--	--	21	5	4	--	--	--	--	--
08/22/73 1101	5001 5050	19.0C 22950			--	33	--	--	--	49	5	8	--	--	--	--	--
09/05/73 1305	5001 5050	18.0C 21840	8.1	8.0 8.1	--	3	--	--	--	1.3 R 18	5	2	--	--	--	--	--
09/05/73 1306	5001 5050	19.0C 26040			--	30	--	--	--	30	5	6	--	--	--	--	--
09/19/73 0935	5001 5050	19.0C 14850	8.0	8.0 7.9	--	3	--	--	--	33	5	6	--	--	--	--	--



TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.M.	F-PH L-PH	OISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L	BOD SUS S	COO V SUS S	CYANIDE PHENOLS	TOC DOC	IODIDE T DOOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
E0 B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND																	
10/04/72 1530	5001 5050	19 C	9.1	8.1	--	3	--	--	--	109 5	16	--	--	--	--	--	--
10/18/72 1420	5001 5050	18 C	8.3	7.7 7.8	--	3	--	--	--	45 5	6	--	--	--	--	--	--
10/20/72 1125	5001 5050				--		--	--	--	58 5	8	--	--	--	--	--	--
10/20/72 1215	5001 5050				--		--	--	--	74 5	13	--	--	--	--	--	--
10/20/72 1242	5001 5050				--		--	--	--	45 5	8	--	--	--	--	--	--
10/20/72 1330	5001 5050				--		--	--	--	68 5	10	--	--	--	--	--	--
10/20/72 1542	5001 5050				--		--	--	--	47 5	2	--	--	--	--	--	--
11/15/72 1110	5001 5050	13 C	9.7	7.7 7.5	--	3	--	--	--	71 5	10	--	--	--	--	--	--
03/15/73 1245	5001 5050	12 C	10.5	8.0 7.3	--	3	--	--	--	60 5	12	--	--	--	--	--	--
03/28/73 1100	5001 5050	12.0C 265	10.5	7.6 7.7	--	3	--	--	--	58 5	11	--	--	--	--	--	--
04/11/73 1345	5001 5050	16.0C 350	9.4	7.5 7.5	--	3	--	--	--	1.7 B 50 5	--	--	--	--	--	--	--
04/25/73 1200	5001 5050	16.0C 445	10.2	8.2 7.7	--	3	--	--	--	60 5	9	--	--	--	--	--	--
04/25/73 1201	5001 5050		455		--	15	--	--	--	79 5	10	--	--	--	--	--	--
04/25/73 1202	5001 5050		460		--	25	--	--	--	85 5	10	--	--	--	--	--	--
04/25/73 1203	5001 5050		455		--	39	--	--	--	105 5	13	--	--	--	--	--	--
05/09/73 1225	5001 5050	18.0C 1930	9.3	8.1 7.9	--	3	--	--	--	1.2 B 70 5	--	--	--	--	--	--	--
05/30/73 1640	5001 5050	21.0C 2500	9.0	7.8 8.5	--	3	--	--	--	103 5	13	--	--	--	--	--	--
06/12/73 1710	5001 5050	22.0C 2890	8.5	7.9 8.0	--	3	--	--	--	1.2 B 74 5	--	--	--	--	--	--	--
06/12/73 1711	5001 5050		3700		--	39	--	--	--	80 5	10	--	--	--	--	--	--
06/27/73 1530	5001 5050	23.0C 6300	8.7	8.0 7.6	--	3	--	--	--	52 5	7	--	--	--	--	--	--
06/27/73 1531	5001 5050		7400	7.9	--	41	--	--	--	94 5	12	--	--	--	--	--	--
07/11/73 1530	5001 5050	23.0C 8571	9.0	8.1 8.2	--	3	--	--	--	2.0 B 103 5	13	--	--	--	--	--	--
07/11/73 1531	5001 5050		9279		--	38	--	--	--	126 5	16	--	--	--	--	--	--
08/07/73 1525	5001 5050	20.0C 8170	9.4	9.3 8.2	--	3	--	--	--	1.4 B 72 5	10	--	--	--	--	--	--
08/07/73 1526	5001 5050		9000		--	37	--	--	--	92 5	10	--	--	--	--	--	--
08/22/73 1220	5001 5050	20.0C 6800		7.9	--	32	--	--	--	113 5	16	--	--	--	--	--	--
08/22/73 1220	5001 5050	20.0C 6920	8.6	7.9 8.0	--	3	--	--	--	108 5	14	--	--	--	--	--	--
09/05/73 1425	5001 5050	19.0C 5542	8.6	8.1 8.3	--	3	--	--	--	0.9 B 64 5	7	--	--	--	--	--	--
09/05/73 1425	5001 5050	19.0C 6295		7.9	--	36	--	--	--	80 5	12	--	--	--	--	--	--
09/19/73 1050	5001 5050	20.0C 1940	8.0	8.1 7.8	--	3	--	--	--	85 5	10	--	--	--	--	--	--
E0 B 803.5 217.0 SAN PABLO BAY NEAR RODEO																	
04/11/73 1150	5001 5050	16.0C 15200	8.8	7.6 7.3	--	3	--	--	--	1.6 B 19 5	3	--	--	--	--	--	--
05/09/73 1010	5001 5050	16.0C 20700	8.8	8.0 7.6	--	3	--	--	--	0.9 B 26 5	5	--	--	--	--	--	--
06/12/73 1510	5001 5050	20.0C 27800	8.2	7.9 7.8	--	3	--	--	--	1.3 B 57 5	12	--	--	--	--	--	--
06/12/73 1511	5001 5050		32000		--	42	--	--	--	74 5	11	--	--	--	--	--	--
07/11/73 1305	5001 5050	20.0C 31920	7.7	7.9 7.9	--	3	--	--	--	1.0 B 71 5	9	--	--	--	--	--	--
07/11/73 1306	5001 5050		36280		--	43	--	--	--	71 5	11	--	--	--	--	--	--

TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	SET 5		COD SUS S	COO V SUS S	CYANIDE PHENOLS	TOC DOC	IODIDE T OOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
								O+G COLOR	ML/L MG/L								
FO 8 803.5 217.0		SAN PABLO BAY NEAR RODEO										CONTINUED					
08/07/73	5001	19.0C	8.0	7.9		3				1.0 R							
1310	5050	33400		8.1	--					31 5	4						
08/07/73	5001	19.0C				35											
1311	5050	37100			--					29 5	4						
09/05/73	5001	18.0C		7.8		3				0.6 R							
1210	5050	32500		7.9	--					59 5	10						
09/05/73	5001	18.0C		7.8		36											
1211	5050	36400			--					26 5	5						
EO 8 803.6 159.3		SUISUN BAY OFF MIDDLE POINT															
03/28/73	5001	12.0C	10.4	7.7		3											
1030	5050	305		7.7	--					35 5	8						
04/25/73	5001	17.0C	10.6	8.4		3											
1130	5050	1480		7.9	--					33 5	7						
05/30/73	5001	21.0C	9.1	8.0		3											
1615	5050	6000		8.5	--					127 5	16						
06/27/73	5001	23.0C	8.6	8.0		3											
1505	5050	9200		7.5	--					41 5	8						
06/27/73	5001			7.9		34											
1506	5050	14000			--					98 5	14						
08/22/73	5001	20.0C	9.2	7.4		3											
1150	5050	8640		8.0	--					45 5	87						
08/22/73	5001	20.0C		7.8		35											
1151	5050	12720			--					81 5	13						
09/19/73	5001	19.0C	8.1	8.2		3											
1025	5050	3950		8.0	--					73 5	10						
EO 8 804.0 203.0		SUISUN BAY NEAR PRESTON POINT															
10/18/72	5001	18 C	8.0	7.8		3											
1330	5050				--					29 5	4						
03/15/73	5001	12 C	10.2	7.9		3											
1200	5050			7.5	--					57 5	14						
03/28/73	5001	12.0C	10.7	7.9		3											
1005	5050	690		7.8	--					47 5	11						
04/11/73	5001	16.0C	9.4	7.6		3				1.6 R							
1305	5050	1750		7.6	--					52 5	5						
04/25/73	5001	16.0C	9.0	8.0		3											
1045	5050	6300		7.8	--					56 5	7						
04/25/73	5001					15											
1046	5050	9950			--					88 5	10						
04/25/73	5001					25											
1047	5050	15800			--					44 5	7						
04/25/73	5001					40											
1048	5050	18100			--					68 5	9						
05/04/73	5001	17.0C	8.6			3											
1100	5050	5000			--					178 5	18						
05/04/73	5001	17.0C	8.6			12											
1101	5050	5000			--					216 5	20						
05/04/73	5001	17.0C	9.0			3											
1200	5050	3800			--					157 5	17						
05/04/73	5001	17.0C	8.8			20											
1201	5050	4500			--					191 5	18						
05/04/73	5001	17.0C	9.0			3											
1300	5050	4000			--					118 5	12						
05/04/73	5001	17.0C	8.7			20											
1301	5050	4700			--					154 5	16						
05/04/73	5001	17.0C	8.7			3											
1400	5050	4900			--					102 5	12						
05/04/73	5001	17.0C	8.7			20											
1401	5050	6000			--					270 5	28						
05/04/73	5001	17.0C	8.5			3											
1500	5050	8000			--					231 5	25						
05/04/73	5001	17.0C	8.5			20											
1501	5050	8000			--					254 5	28						
05/04/73	5001	17.0C	8.5			3											
1600	5050	9000			--					225 5	23						
05/04/73	5001	17.0C	8.5			20											
1601	5050	10000			--					284 5	30						
05/04/73	5001	16.0C	8.5			3											
1700	5050	12000			--					226 5	24						
05/04/73	5001	16.0C	8.4			20											
1701	5050	12000			--					291 5	31						
05/04/73	5001	16.0C	8.4			3											
1800	5050	13000			--					176 5	21						
05/04/73	5001	16.0C	8.3			20											
1801	5050	14000			--					317 5	33						



TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET 5 ML/L MG/L	800 SUS S	COD V SUS S	CYANIDE PHENOLS	TOC OOC	IODIDE T OOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
E0 B 804.0 203.0 SUISUN BAY NEAR PRESTON POINT CONTINUED																	
05/04/73 1900	5001 5050	16.0C 12000	8.9		--	3	--	--	--	153 5	17	--	--	--	--	--	--
05/04/73 1901	5001 5050	16.0C 16000	8.3		--	20	--	--	--	126 5	15	--	--	--	--	--	--
05/09/73 1140	5001 5050	17.0C 7640	9.2	8.0 7.7	--	3	--	--	--	1.1 8 55 5	-- 15	--	--	--	--	--	--
05/30/73 1545	5001 5050	20.0C 8900	9.3	8.1 8.4	--	3	--	--	--	186 5	20	--	--	--	--	--	--
06/12/73 1625	5001 5050	21.0C 11250	8.4	7.9 7.9	--	3	--	--	--	1.8 8 90 5	-- 14	--	--	--	--	--	--
06/12/73 1626	5001 5050	15020			--	46	--	--	--	71 5	10	--	--	--	--	--	--
06/27/73 1440	5001 5050	22.0C 16250	8.5	7.9 7.6	--	3	--	--	--	50 5	10	--	--	--	--	--	--
06/27/73 1441	5001 5050	18500		7.8	--	47	--	--	--	2.2 8 212 5	-- 26	--	--	--	--	--	--
07/11/73 1420	5001 5050	22.0C 17240	9.5	8.3 8.2	--	3	--	--	--	62 5	8	--	--	--	--	--	--
07/11/73 1421	5001 5050	19810			--	43	--	--	--	435 5	49	--	--	--	--	--	--
08/07/73 1440	5001 5050	20.0C 16400	10.0	8.4 8.2	--	3	--	--	--	1.8 8 82 5	-- 11	--	--	--	--	--	--
08/07/73 1441	5001 5050	20.0C 20200			--	42	--	--	--	23 5	2	--	--	--	--	--	--
08/22/73 1130	5001 5050	20.0C 14080	8.8	8.0 7.9	--	3	--	--	--	64 5	11	--	--	--	--	--	--
08/22/73 1131	5001 5050	19.0C 17360		8.0	--	39	--	--	--	142 5	20	--	--	--	--	--	--
09/05/73 1330	5001 5050	18.0C 12600	8.4	8.1 8.3	--	3	--	--	--	1.4 8 80 5	-- 10	--	--	--	--	--	--
09/05/73 1331	5001 5050	19.0C 18380		7.9	--	34	--	--	--	31 5	6	--	--	--	--	--	--
09/19/73 1000	5001 5050	19.0C 12120	7.5	8.1 7.9	--	3	--	--	--	108 5	16	--	--	--	--	--	--
E0 B 804.4 156.2 HONKER BAY NEAR WHEELER POINT																	
03/15/73 1230	5001 5050	11 C 10.8	8.0 7.5		--	3	--	--	--	72 5	12	--	--	--	--	--	--
03/29/73 1050	5001 5050	12.0C 252	10.3	7.7 7.8	--	3	--	--	--	44 5	9	--	--	--	--	--	--
04/12/73 1130	5001 5050	15.0C 403	9.5	7.6 7.6	--	3	--	--	--	66 5	12	--	--	--	--	--	--
04/26/73 1020	5001 5050	17.0C 2220	10.6	8.3 7.8	--	3	--	--	--	46 5	7	--	--	--	--	--	--
05/10/73 1020	5001 5050	18.0C 2480	9.0	8.0 7.7	--	3	--	--	--	99 5	12	--	--	--	--	--	--
05/31/73 1455	5001 5050	20.0C 2180	8.6	7.7 8.9	--	3	--	--	--	92 5	16	--	--	--	--	--	--
06/13/73 1545	5001 5050	21.0C 3300	8.2	7.8 7.9	--	3	--	--	--	135 5	16	--	--	--	--	--	--
06/26/73 1330	5001 5050	23.0C 6700	7.8	7.8 8.0	--	3	--	--	--	80 5	12	--	--	--	--	--	--
07/11/73 1505	5001 5050	22.0C 9680	8.7	8.2 8.0	--	3	--	--	--	159 5	20	--	--	--	--	--	--
08/08/73 1350	5001 5050	20.0C 8430	9.3	8.2 8.0	--	3	--	--	--	185 5	20	--	--	--	--	--	--
08/23/73 1300	5001 5050	21.0C 7420	8.6	7.7 7.7	--	3	--	--	--	196 5	26	--	--	--	--	--	--
09/06/73 1305	5001 5050	19.0C 5830		8.0 8.2	--	3	--	--	--	97 5	13	--	--	--	--	--	--
09/20/73 1050	5001 5050	20.0C 2220	7.9	8.0 7.8	--	3	--	--	--	116 5	15	--	--	--	--	--	--
E0 B 805.3 226.3 SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER																	
04/11/73 1010	5001 5050	17.0C 18200	11.2	7.9 7.4	--	3	--	--	--	48 5	11	--	--	--	--	--	--
05/09/73 0845	5001 5050	16.0C 26500	10.1	8.3 7.6	--	3	--	--	--	49 5	10	--	--	--	--	--	--
06/12/73 1350	5001 5050	21.0C 27800	8.1	7.9 7.7	--	3	--	--	--	96 5	16	--	--	--	--	--	--
07/10/73 1325	5001 5050	21.0C 36000	7.8	8.0 7.8	--	3	--	--	--	152 5	15	--	--	--	--	--	--
08/07/73 1200	5001 5050	20.0C 33500	8.0	7.7 7.7	--	3	--	--	--	41 5	6	--	--	--	--	--	--
09/05/73 1050	5001 5050	18.0C 34700	7.5	7.8 7.8	--	3	--	--	--	111 5	14	--	--	--	--	--	--

TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	OO G.H.	F-PH L-PH	DISCH MGAS	DEPTH TURB	T-L CHLOR	SET 5		BOD SUS 5	COD V SUS 5	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
								O+G COLOR	ML/L MG/L								
E0 8 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH																	
10/03/72 1300	5001 5050	18.5C	8.7	8.0	--	3	--	--	--	114	5	16	--	--	--	--	--
10/18/72 1215	5001 5050	18 C	8.0	7.5 7.3	--	3	--	--	--	51	5	6	--	--	--	--	--
11/15/72 1010	5001 5050	14 C	9.2	7.1 7.6	--	3	--	--	--	98	5	12	--	--	--	--	--
03/15/73 1005	5001 5050	11 C	10.7	7.5 7.6	--	3	--	--	--	72	5	13	--	--	--	--	--
03/29/73 1000	5001 5050	12.0C 320	10.1	7.7 7.6	--	3	--	--	--	89	5	15	--	--	--	--	--
04/12/73 1040	5001 5050	16.0C 1210	9.4	7.7 7.6	--	3	--	--	--	78	5	12	--	--	--	--	--
04/26/73 0940	5001 5050	17.0C 4920	9.9	8.0 7.7	--	3	--	--	--	56	5	9	--	--	--	--	--
05/10/73 0935	5001 5050	17.0C 5400	8.9	8.0 7.7	--	3	--	--	--	100	5	12	--	--	--	--	--
05/31/73 1415	5001 5050	20.0C 7600	8.8	7.9 7.7	--	3	--	--	--	173	5	24	--	--	--	--	--
06/13/73 1345	5001 5050	20.0C 7330	8.1	7.8 7.9	--	3	--	--	--	79	5	11	--	--	--	--	--
06/27/73 1330	5001 5050	23.0C 12600	9.3	7.6 7.5	--	3	--	--	--	84	5	12	--	--	--	--	--
08/08/73 1145	5001 5050	19.0C 13600	9.4	8.0 8.0	--	3	--	--	--	166	5	20	--	--	--	--	--
08/22/73 1000	5001 5050	19.0C 11360	9.1	8.0 8.0	--	3	--	--	--	85	5	12	--	--	--	--	--
09/06/73 1050	5001 5050	18.0C 9040	6.8	8.0 8.0	--	3	--	--	--	80	5	15	--	--	--	--	--
09/19/73 0850	5001 5050	19.0C 6348	8.3	7.9 7.9	--	3	--	--	--	116	5	15	--	--	--	--	--
E0 5 809.2 205.3 CORDELIA SLOUGH AT CYGNUS																	
11/14/72 0940	5001 5001	11 C 5250	7.1	7.1	--	3	--	--	--	3.4	8	--	--	--	--	--	--
02/26/73 1045	5001 5050	13 C	7.9	7.4	--	3	--	--	--	78	5	23	--	--	--	--	--
03/27/73 0920	5001 5050	13 C 1780	8.2	7.2	--	3	--	--	--	62	5	18	--	--	--	--	--
04/26/73 0905	5001 5050	19 C 1290	8.1	7.7	--	3	--	--	--	102	5	15	--	--	--	--	--
05/24/73 0920	5001 5050	19 C 5800	8.3	7.9	--	3	--	--	--	82	5	14	--	--	--	--	--
06/25/73 1125	5001 5050	24 C 6600	6.9	7.5	--	3	--	--	--	88	5	14	--	--	--	--	--
E0 5 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND																	
10/13/72 1125	5001 5050	19 C	6.6	7.5	--	2	--	--	--	66	5	10	--	--	--	--	--
11/14/72 1330	5001 5050	12 C 8020	8.1	7.4	--	3	--	--	--	2.4	8	--	--	--	--	--	--
02/26/73 1415	5001 5050	13 C	7.4	7.5	--	3	--	--	--	131	5	25	--	--	--	--	--
03/27/73 1305	5001 5050	14 C 1720	8.4	7.3	--	3	--	--	--	51	5	16	--	--	--	--	--
04/12/73 0950	5001 5050	17.0C 1330	8.0	7.4	--	3	--	--	--	2.6	8	--	--	--	--	--	--
04/26/73 0851	5001 5050	1650			--	15	--	--	--	90	5	14	--	--	--	--	--
04/26/73 0852	5001 5050	1670			--	25	--	--	--	89	5	13	--	--	--	--	--
04/26/73 0853	5001 5050	1700			--	80T	--	--	--	93	5	14	--	--	--	--	--
04/26/73 1310	5001 5050	20 C 1660	8.8	8.1	--	3	--	--	--	74	5	12	--	--	--	--	--
05/10/73 0845	5001 5050	18.0C 3700	7.4	7.7	--	3	--	--	--	2.2	8	--	--	--	--	--	--
05/24/73 1340	5001 5050	19 C 3880	8.8	8.3	--	3	--	--	--	104	5	22	--	--	--	--	--
06/13/73 1230	5001 5050	21.0C 4700	7.4	7.7	--	3	--	--	--	3.0	8	--	--	--	--	--	--
06/13/73 1231	5001 5050	21 C 4700			--	29	--	--	--	217	5	30	--	--	--	--	--
06/21/73 0900	5001 5050				--	3	--	--	--	133	5	17	--	--	--	--	--
06/21/73 0901	5001 5050				--	80T	--	--	--	162	5	18	--	--	--	--	--



TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T+L CHLOR	O+G COLOR	SET S ML/L	BOD SUS S	COD V SUS S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
		E0 S 810.8 202.8			SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND										CONTINUED		
06/21/73	5001 1130 5050				--	3	--	--	--	99	5	18	--	--	--	--	--
06/21/73	5001 1131 5050				--	80T	--	--	--	136	5	18	--	--	--	--	--
06/21/73	5001 1500 5050				--	3	--	--	--	106	5	15	--	--	--	--	--
06/21/73	5001 1501 5050				--	80T	--	--	--	276	5	32	--	--	--	--	--
06/25/73	5001 1455 5050	24 C 5900	8.8	7.9	--	3	--	--	--	86	5	15	--	--	--	--	--
07/23/73	5001 1345 5050	20 C 9259	10.3	8.1	--	3	--	--	--	78	5	14	--	--	--	--	--
08/08/73	5001 1030 5050	20 C 10700	8.3	7.4	--	3	--	--	--	2.2 R 117	5	15	--	--	--	--	--
08/08/73	5001 1031 5050	20.0C 11000		7.5	--	30	--	--	--	144	5	17	--	--	--	--	--
08/20/73	5001 1300 5050	20.0C 10500	7.4	7.8	--	3	--	--	--	60	5	10	--	--	--	--	--
09/06/73	5001 1140 5050	19.0C 11200	6.9	7.7	--	3	--	--	--	1.6 R 55	5	6	--	--	--	--	--
09/06/73	5001 1141 5050	20.0C 11150		7.7	--	28	--	--	--	90	5	13	--	--	--	--	--
09/18/73	5001 1235 5050	20 C 10000	8.0	8.1	--	3	--	--	--	72	5	9	--	--	--	--	--
		E0 S 811.0 204.8			CHADBOURNE SLOUGH AT CHADBOURNE ROAD												
11/14/72	5001 1230 5001	11 C 800	8.5	7.1	--	3	--	--	--	4.0 R --	--	--	--	--	--	--	--
02/26/73	5001 1300 5050	13 C	9.0	7.3	--	3	--	--	--	33	5	16	--	--	--	--	--
03/27/73	5001 1135 5050	15 C 1320	8.9	7.3	--	3	--	--	--	66	5	18	--	--	--	--	--
04/26/73	5001 1155 5050	22 C 1520	8.9	8.1	--	3	--	--	--	77	5	15	--	--	--	--	--
05/24/73	5001 1140 5050	20 C 3900	7.6	7.8	--	3	--	--	--	113	5	19	--	--	--	--	--
06/25/73	5001 1320 5050	23 C 6500	7.9	7.6	--	3	--	--	--	65	5	12	--	--	--	--	--
06/25/73	5001 1545 5050	22 C 4600	8.1	8.0	--	1	--	--	--	64	5	10	--	--	--	--	--
		E0 S 811.2 158.5			MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD												
11/14/72	5001 1435 5001	13 C	8.4	7.4	--	3	--	--	--	2.2 R --	--	--	--	--	--	--	--
02/26/73	5001 1520 5050	13 C	9.4	7.4	--	3	--	--	--	61	5	16	--	--	--	--	--
03/27/73	5001 1405 5050	13 C 950	9.5	7.1	--	3	--	--	--	46	5	16	--	--	--	--	--
04/26/73	5001 1405 5050	20 C 1660	8.9	8.0	--	3	--	--	--	73	5	13	--	--	--	--	--
05/24/73	5001 1440 5050	19 C 3320	7.8	7.8	--	3	--	--	--	80	5	14	--	--	--	--	--
06/25/73	5001 1543 5050	23 C 5600	7.4	7.8	--	3	--	--	--	48	5	10	--	--	--	--	--
		E0 S 811.5 207.2			CORDELIA SLOUGH AT UPPER END												
03/27/73	5001 1025 5050	14 C 575	10.0	7.7	--	3	--	--	--	62	5	18	--	--	--	--	--
04/26/73	5001 1055 5050	21 C 1070	17.6	9.1	--	1	--	--	--	61	5	11	--	--	--	--	--
05/24/73	5001 1020 5050	20 C 4750	7.5	8.2	--	2	--	--	--	190	5	26	--	--	--	--	--
06/25/73	5001 1210 5050	22 C 3100	7.0	7.8	--	3	--	--	--	108	5	16	--	--	--	--	--
		E0 S 813.6 201.2			HILL SLOUGH AT GRIZZLY ISLAND ROAD												
11/14/72	5001 1515 5001	11 C	7.1	7.4	--	3	--	--	--	6.0 R --	--	--	--	--	--	--	--
02/26/73	5001 1545 5050	13.0C	7.0	7.5	--	3	--	--	--	43	5	21	--	--	--	--	--
03/27/73	5001 1440 5050	15 C 990	8.5	7.5	--	3	--	--	--	40	5	6	--	--	--	--	--
04/26/73	5001 1453 5050	21 C 2540	9.1	8.3	--	3	--	--	--	87	5	22	--	--	--	--	--
05/24/73	5001 1520 5050	19 C 3100	8.1	8.3	--	3	--	--	--	175	5	38	--	--	--	--	--

TABLE D-4 (CONTINUED)  
MISCELLANEOUS CONSTITUENTS IN SURFACE WATER

DATE TIME	SAMP LAB	TEMP EC	DO G.H.	F-PH L-PH	DISCH MBAS	DEPTH TURB	T-L CHLDR	SET S		BOD SUS S	COD V SUS S	CYANIDE PHENOLS	TOC DOC	IODIDE T ODOR	BROMIDE SULFITE	T SULF D SULF	CC EXT CA EXT
								O-G COLOR	ML/L MG/L								
		E0 5 813.6 201.2		HILL SLOUGH AT GRIZZLY ISLAND ROAD										CONTINUED			
06/25/73 1620	5001 5050	24 3700	C	9.4 8.2	--	3	--	--	--	122	5	23	--	--	--	--	--
		E3 2100.51		GREEN VALLEY CREEK AT CORDELIA													
11/14/72 1115	5001 5001	13	C	9.6 7.6	--	3	--	--	--	2.0	8	--	--	--	--	--	--
02/26/73 1200	5001 5050	13	C	9.9 7.5	--	3	--	--	--	550	5	268	--	--	--	--	--
		E5 1423.01		ARROYO VALLE NEAR UPSTREAM END OF LAKE DEL VALLE													
04/06/73 1630	5050 5050	56 500	F	8.9	--	--	--	--	--	7	5	5	--	--	--	--	--
04/13/73 1330	5050 5050	60.0F 540	F	10.9 8.4	--	--	--	--	--	4	5	3	--	--	--	--	--



TABLE D-5

NUTRIENT ANALYSIS OF SURFACE WATER

Sampler and Lab Agency Codes

- 5001 - U. S. Bureau of Reclamation
- 5050 - Department of Water Resources
- 5063 - Santa Cruz County Health Department

Abbreviations and Constituents

- TIME - Pacific Standard Time on a 24-hour clock
- G.H. - Instantaneous gage height in feet above an established datum
- DISCH. - Instantaneous discharge in cubic feet per second
- TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
- DEPTH - Depth in feet at which sample was collected
- PH - Measure of acidity (<7) or alkalinity (>7) of water
- EC - Electrical conductance in micromhos at 25° C
- TURB - Jackson Turbidity Units measured with a Hellige Turbidimeter (E) or a Hack Nephelometer (A)
- F-CO2 - Field determination of carbon dioxide in milligrams per liter
- CACO3 P - Field Alkalinity (Phenol)
- CACO3 T - Field Alkalinity (Total)
- HCO3 - Bicarbonate in milligrams per liter
- CO3 - Carbonate in milligrams per liter
- NH3 - Unfiltered ammonia
- NO2 - Unfiltered nitrite
- NO3 - Unfiltered nitrate
- F ORG N - Dissolved organic nitrogen
- U ORG N - Organic nitrogen
- F (NH3 + - Ammonia and dissolved organic nitrogen
- U ORN N) - Ammonia and organic nitrogen
- DIS - Dissolved acid hydrolyzable phosphate
- A.H.PO4
- F H3PO4 - Dissolved orthophosphate
- U H3PO4 - Total orthophosphate
- F TOT P - Dissolved total phosphorus
- U TOT P - Total Phosphorus

TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER																		
DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD		FIELD		LAB		NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER								
				LABORATORY PH	EC	TURB F-CO2	CAC03 CAC03	P T	HC03 CO3	NH3	NO2 NO3	F U	ORG ORG	N N	F U	(NH3 ORG N)	DIS A.H.P04	F U
D0 1100.00 BRANCIFORTE CREEK AT SANTA CRUZ																		
03/19/73	5063		50.0F	7.2		300				--	--	--	--	--	0.07	--		
1415	5050									--	0.94	--	--	--	--	--		
09/27/73	5050		62 F	7.7		450	1A		182		--	--	--	--	0.14	--		
1330	5050	1 E		8.3		482			0	--	0.26	--	--	--	--	--		
D0 1180.01 SAN LORENZO RIVER AT PARADISE PARK																		
03/19/73	5063		50.0F	7.5		335					--	--	--	--	0.07	--		
1000	5050									--	0.18	--	--	--	--	--		
09/27/73	5050		57 F	7.7		330	0A		134		--	--	--	--	0.14	--		
1000	5050			8.3		376			0	--	0.26	--	--	--	--	--		
D0 1220.01 ZAYANTE CREEK AT FELTON																		
03/19/73	5063		49.0F	7.4		415					--	--	--	--	0.22	--		
1115	5050									--	0.34	--	--	--	--	--		
09/27/73	5050		56 F	7.7		330	0A		125		--	--	--	--	0.35	--		
1115	5050	7 E		8.1		374			0	--	0.44	--	--	--	--	--		
D0 1498.01 SAN LORENZO RIVER AT BOULDER CREEK																		
03/19/73	5063		48.0F	7.2		195					--	--	--	--	0.02	--		
1200	5050									--	0.08	--	--	--	--	--		
09/27/73	5050		58 F	7.7		440	1A		165		--	--	--	--	0.06	--		
1150	5050	5 E		8.2		485			0	--	0.04	--	--	--	--	--		
D0 2020.00 APTOS CREEK BELOW VALENCIA CREEK																		
03/19/73	5063		48 F	7.7		440					--	--	--	--	0.09	--		
1330	5050									--	0.28	--	--	--	--	--		
09/27/73	5050		60 F	8.0		670	0A		247		--	--	--	--	0.19	--		
1400	5050	1 E		8.5		778			13	--	0.13	--	--	--	--	--		
D0 3100.00 SOQUEL CREEK AT SOQUEL																		
03/19/73	5063		49.0F	7.8		530					--	--	--	--	0.05	--		
1300	5050									--	0.15	--	--	--	--	--		
09/27/73	5050		2.72 72 F	8.0		650	4A		196		--	--	--	--	0.10	--		
1330	5050			8.3		724			0	--	0.08	--	--	--	--	--		
D0 4010.01 SCOTT CREEK AT HIGHWAY 1																		
03/19/73	5063		50.0F	6.8		225					--	--	--	--	0.02	--		
0930	5050									--	0.16	--	--	--	--	--		
09/27/73	5050		61 F	7.3		370	0A		103		--	--	--	--	0.05	--		
1530	5050	2 E		8.3		311			0	--	0.05	--	--	--	--	--		
D1 1250.00 PAJARO RIVER AT CHITTENDEN																		
07/18/73	5050	1.00	65 F	8.4		1400			531		--	--	--	--	0.12	--		
0945	5050			8.1		1950			0	--	1.6	--	1.0	--	--	0.40		
D1 1371.50 UVAS CREEK NR MORGAN HILL BL UVAS DAM																		
07/18/73	5050		65 F	8.2		250			171		--	--	--	--	0.00	--		
1215	5050			8.1		314			0	--	0.04	--	0.3	--	--	0.05		
D1 2450.00 SAN BENITO RIVER NEAR WILLOW CREEK SCHOOL																		
07/18/73	5050		80 F	8.4		850			418		--	--	--	--	0.00	--		
1340	5050			8.5		876			17	--	0.02	--	0.6	--	--	0.07		
D2 1006.60 HERRITT LAKE DRAIN AT PUMP																		
07/18/73	5050		64 F	8.2		1950			473		--	--	--	--	0.02	--		
0820	5050			8.3		2950			0	--	0.00	--	4.2	--	--	0.39		
08/14/73	5050		70 F	8.0		2890			525		--	--	--	--	0.10	--		
0930	5050			8.1		2850			0	--	0.01	--	--	--	--	0.13		
D2 1030.30 BLANCO DRAIN AT PUMP LIFT																		
07/18/73	5050		62 F	8.0		1350			375		--	--	--	--	1.4	--		
0730	5050			8.1		1950			0	--	2.3	--	0.8	--	--	1.4		
08/14/73	5050		65 F	8.2		2380			428		--	--	--	--	0.84	--		
0800	5050			7.9		2370			0	--	23.	--	--	--	--	1.2		
D2 1325.10 SALINAS RIVER NEAR GONZALES																		
07/17/73	5050		74 F	8.4		350			155		--	--	--	--	0.01	--		
1215	5050			8.1		462			0	--	0.11	--	0.8	--	--	0.20		
D2 1850.00 SALINAS RIVER NEAR BRADLEY																		
07/17/73	5050	4.79	70 F	8.4		220			123		--	--	--	--	0.01	--		
1015	5050			8.3		294			0	--	0.09	--	0.3	--	--	0.03		
D4 1200.00 CARMEL RIVER AT ROBLES DEL RIO																		
07/17/73	5050	3.53	72 F	8.4		700			186		--	--	--	--	0.00	--		
1335	5050			8.2		731			0	--	0.03	--	0.2	--	--	0.00		
E0 B 735.0 215.0 SAN FRANCISCO BAY AT SAN MATED BRIDGE (SHIP CHANNEL)																		
10/11/72	5050		65 F	7.9		45000	2A				--	--	--	--	0.29	--		
0930	5050					48400				0.00	0.29	0.2	0.2	0.01	--	0.58		
11/27/72	5050		57 F	7.9		38000	3A				--	--	--	--	0.26	--		
1230	5050					43700				0.04	0.46	0.2	0.24	0.16	--	0.40		
12/11/72	5050		48 F	7.9		40000	3A				--	--	--	--	0.25	--		
1115	5050					42200				0.02	0.43	0.1	0.12	0.19	--	0.96		



TABLE D-5 (CONTINUED)

DATE TIME	SAMP LAB	G.M. DISCH.	TEMP DEPTH	FIELD LABORATORY PH	TURB EC	NUTRIENT ANALYSIS OF SURFACE WATER				NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER						
						FIELD CACO3 T	FIELD CACO3 T	LAB HCO3 CO3	LAB NH3	N02 N03	F ORG U ORG	N N	F (NH3 U ORG N)	DIS A.M.P04	F H3P04 U H3P04	F TOT P U TOT P
FO B 735.0 215.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL) CONTINUED																
01/23/73	5050		49	F	7.9	28000	2A								0.15	--
1130	5050					29300			0.17	0.42	0.0	0.17	0.00		--	0.17
02/06/73	5050		51	F	7.9	28000	4A								0.16	--
1030	5050					28600			0.13	0.48	0.1	0.23	0.02		--	0.22
03/20/73	5050		53	F	8.1	26000	19A								0.24	--
0915	5050					26600			0.18	0.65	0.0	0.18	0.16		--	0.41
04/05/73	5050		58	F	8.2	26000	7A								0.26	--
0915	5050					27400			0.01	0.59	0.1	0.11	0.01		--	0.36
05/03/73	5050		60	F	8.2	33000	15A								0.24	--
0810	5050					36300			0.01	0.23	0.4	0.41	0.04		--	0.39
06/18/73	5050		66	F	8.0	38000	2A								0.45	--
1000	5050					41300			0.00	0.56	0.3	0.3	0.00		--	0.68
07/30/73	5050		69	F	8.1	41000	2A								0.53	--
0830	5050					44400			0.00	0.38	0.3	0.3	0.01		--	0.85
08/14/73	5050		67	F	8.2	43000	3A								0.46	--
0920	5050					43600			0.03	0.35	0.0	0.03	0.13		--	0.59
09/13/73	5050		66	F	8.2	44000	1A								0.43	--
0810	5050					46900			0.07	0.41	0.3	0.37	0.21		--	0.69
EO B 736.2 212.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)																
10/11/72	5050		65	F	7.9	45000	3A								0.38	--
1100	5050					47500			0.00	0.32	0.2	0.2	0.00		--	0.64
11/27/72	5050		57	F	8.1	40000	4A								0.29	--
1330	5050					43600			0.04	0.48	0.1	0.14	0.13		--	0.43
12/11/72	5050		45	F	8.0	41000	4A								0.24	--
1200	5050					42300			0.01	0.42	0.0	0.01	0.14		--	0.40
01/23/73	5050		49.6	F	7.9	32000	6A								0.18	--
1220	5050					32600			0.16	0.47	0.0	0.16	0.00		--	0.21
02/06/73	5050		51	F	7.9	28000	4A								0.18	--
1100	5050					28100			0.13	0.51	0.0	0.13	0.03		--	0.23
03/20/73	5050		53	F	8.0	26000	53A								0.22	--
1015	5050					25700			0.20	0.74	0.1	0.3	0.24		--	0.46
04/05/73	5050		59	F	8.2	26000	17A								0.28	--
1005	5050					26800			0.00	0.62	0.0	0.0	0.00		--	0.37
05/03/73	5050		60	F	8.2	34000	10A								0.19	--
0900	5050					36400			0.00	0.19	0.3	0.3	0.00		--	0.28
06/18/73	5050		66	F	8.0	40000	3A								0.29	--
1045	5050					42500			0.00	0.31	0.2	0.2	0.00		--	0.47
07/30/73	5050		70	F	8.1	43000	8A								0.48	--
0930	5050					44500			0.00	0.33	0.4	0.4	0.04		--	0.80
08/14/73	5050		66	F	8.0	44000	21A								0.40	--
1000	5050					43900			0.00	0.29	0.0	0.0	0.15		--	0.57
09/13/73	5050		64	F	8.2	45000	2A								0.36	--
0910	5050					47400			0.04	0.28	0.2	0.24	0.08		--	0.61
FO B 749.2 222.4 SAN FRANCISCO BAY AT TREASURE ISLAND																
10/11/72	5050		62	F	7.9	42000	2A								0.11	--
0850	5050					45500			0.00	0.17	0.2	0.2	0.00		--	0.16
11/27/72	5050		56	F	7.9	37500	6A								0.10	--
1100	5050					40000			0.07	0.28	0.1	0.17	0.03		--	0.16
12/11/72	5050		48	F	8.1	39000	4A								0.07	--
1000	5050					40100			0.10	0.22	0.1	0.2	0.00		--	0.14
01/23/73	5050		48	F	7.8	15000	20A								0.07	--
1000	5050					16900			0.02	0.40	0.0	0.02	0.00		--	0.15
02/06/73	5050		50	F	8.3	23000	10A								0.06	--
0840	5050					23700			0.07	0.38	0.0	0.07	0.18		--	0.23
03/20/73	5050		52	F	8.1	34000	6A								0.10	--
0730	5050					36400			0.07	0.31	0.1	0.17	0.03		--	0.13
04/05/73	5050		55	F	8.2	34000	5A								0.08	--
0800	5050					37600			0.02	0.34	0.2	0.22	0.00		--	0.16
05/03/73	5050		56	F	8.2	41000	5A								0.08	--
0645	5050					45500			0.02	0.20	0.2	0.22	0.02		--	0.11
06/18/73	5050		64	F	8.1	40000	3A								0.12	--
0845	5050					45200			0.00	0.22	0.1	0.1	0.01		--	0.22
07/30/73	5050		63	F	8.0	44000	3A								0.12	--
0700	5050					47900			0.00	0.19	0.3	0.3	0.03		--	0.25
08/14/73	5050		63	F	8.1	44000	1A								0.10	--
0755	5050					48000			0.08	0.18	0.0	0.08	0.03		--	0.16
09/13/73	5050		62	F	8.1	45000	1A								0.10	--
0640	5050					47700			0.06	0.20	0.2	0.26	0.07		--	0.18



TABLE 0-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY		TURB	FIELD CAC03			NH3	NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER				
				PH	EC		F-C02	CAC03	P		NO2	NO3	F ORG N	U ORG N	F (NH3 + U ORG N)
EO B 801.8 222.3 SAN PABLO BAY NEAR PINOLE POINT															
10/04/72	5001		17 C	8.0			3AF		124		--	0.200	--	--	--
1300	5001		3	8.0	39300			0	0.05	0.13	0.20	0.25	--	0.08	0.12
11/16/72	5001		14 C	7.8		4AF		102		--	0.300	--	--	--	--
1010	5001		3	7.8	29700			0	0.13	0.23	0.30	0.43	--	0.08	0.13
12/13/72	5001		8 C	7.0		8AF		101		--	--	--	--	--	--
0930	5001		3	7.8	23200			0	0.15	0.35	0.20	0.35	--	0.10	0.10
02/14/73	5001		11 C	7.8		38AF		87		--	0.300	--	--	0.06	--
1200	5001		3	7.8	5800			0	0.11	0.55	0.30	0.41	--	--	0.16
04/11/73	5001		15.0C	7.6	19100	7AF		112		--	--	--	--	0.09	--
1115	5001		3	7.9	22400			0	0.06	0.39	--	--	--	--	0.13
05/09/73	5001		15.0C	8.0	27500	9AF		119		--	--	--	--	0.07	--
0925	5001		3	7.6	32000			0	0.04	0.16	--	--	--	--	0.11
06/12/73	5001		20.0C	7.9	32800	9AF		121		--	--	0.30	--	0.10	--
1430	5001		3	7.8	37300			0	0.09	0.23	--	--	--	--	0.14
07/10/73	5001			7.9	41000	9AF		131		--	--	0.30	--	0.12	--
1415	5001		3	7.9	42700			0	0.10	0.32	--	--	--	--	0.16
08/07/73	5001		20.0C	7.9	38300	5AF		132		--	--	0.40	--	0.13	--
1235	5001		3	8.1	42500			0	0.09	0.33	--	--	--	--	0.15
09/05/73	5001		18.0C	7.9	38580	9AF		130		--	--	0.30	--	0.08	--
1135	5001		3	8.0	42600			0	0.07	0.19	--	--	--	--	0.14
EO B 802.7 207.0 SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES															
10/18/72	5001		18 C	7.8		5AF		108		--	0.200	--	--	--	--
1300	5001		3	7.8	23800			0	0.07	0.08	0.30	0.37	--	0.05	0.09
11/16/72	5001		14 C	7.7		16AF		99		--	0.400	--	--	--	--
1140	5001		3	7.7	20700			0	0.12	0.26	0.40	0.52	--	0.08	0.14
12/13/72	5001		8 C	7.9		13AF		95		--	0.100	--	--	--	--
1045	5001		3	7.8	17100			0	0.15	0.36	0.30	0.45	--	0.10	0.10
01/15/73	5001		8 C	7.3		30AF		80		--	0.400	--	--	--	--
1050	5001		3	7.6	7680			0	0.14	0.41	0.40	0.54	--	0.12	0.08
02/14/73	5001		11 C	7.6		110AF		80		--	0.400	--	--	0.06	--
1315	5001		3	7.7	310			0	0.11	0.52	--	--	--	--	0.21
03/15/73	5001		12 C	7.8		34AF		86		--	--	0.20	--	0.05	--
1130	5001		3	7.5	6990			0	0.06	0.38	--	--	--	--	0.12
03/28/73	5001		12.0C	7.6	6900	20AF		91		--	--	0.40	--	0.07	--
0940	5001		3	7.4	6670			0	0.10	0.47	--	--	--	--	0.11
04/11/73	5001		16.0C	7.5	6900	38AF		98		--	--	0.30	--	0.08	--
1240	5001		3	7.4	7670			0	0.07	0.42	--	--	--	--	0.08
04/25/73	5001		16.0C	7.6	9800	16AF		98		--	--	0.30	--	0.02	--
1005	5001		3	7.6	11400			0	0.04	0.15	--	--	--	--	0.10
05/09/73	5001		17.0C	7.9	12350	21AF		78		--	--	0.30	--	0.08	--
1110	5001		3	7.7	20900			0	0.06	0.18	--	--	--	--	0.12
05/30/73	5001		19.0C	7.9	17300	21AF		78		--	--	0.30	--	0.08	--
1510	5001		3	7.7	20900			0	0.06	0.18	--	--	--	--	0.12
06/12/73	5001		21.0C	7.9	18000	8AF		102		--	--	0.40	--	0.08	--
1600	5001		3	7.9	17000			0	0.10	0.23	--	--	--	--	0.11
06/27/73	5001		22.0C	7.9	21500	13AF		103		--	--	0.20	--	0.07	--
1410	5001		3	7.9	14600			0	0.10	0.21	--	--	--	--	0.11
07/11/73	5001		21.0C	8.1	22740	18AF		108		--	--	0.20	--	0.10	--
1355	5001		3	8.0	24200			0	0.07	0.22	--	--	--	--	0.19
08/07/73	5001		20.0C	8.1	23200	18AF		108		--	--	0.40	--	0.09	--
1410	5001		3	8.1	24500			0	0.08	0.16	--	--	--	--	0.13
08/22/73	5001		19.0C	7.9	21320	14AF		103		--	--	0.30	--	0.10	--
1100	5001		3	7.9	22500			0	0.08	0.13	--	--	--	--	0.14
09/05/73	5001		18.0C	8.0	21840	11AF		103		--	--	0.30	--	0.06	--
1305	5001		3	8.1	22900			0	0.07	0.13	--	--	--	--	0.14
09/19/73	5001		19.0C	8.0	14850	15AF		98		--	--	0.30	--	0.10	--
0935	5001		3	7.9	17600			0	0.08	0.20	--	--	--	--	0.16
EO B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND															
10/18/72	5001		18 C	7.7		29AF		82		--	0.200	--	--	--	--
1420	5001		3	7.8	5750			0	0.09	0.13	0.40	0.49	--	0.06	0.13
11/15/72	5001		13 C	7.7		34AF		72		--	0.300	--	--	--	--
1110	5001		3	7.5	2500			0	0.07	0.26	0.50	0.57	--	0.07	0.15
12/12/72	5001		7 C	7.7		21AF		74		--	0.300	--	--	--	--
0910	5001		3	7.7	429			0	0.08	0.36	0.40	0.48	--	0.07	0.10
01/15/73	5001		8 C	7.0		80AF		58		--	0.600	--	--	--	--
1200	5001		3	7.4	175			0	0.11	0.64	0.60	0.71	--	0.06	0.15
02/13/73	5001		11 C	7.8		110AF		73		--	0.300	--	--	0.06	--
1240	5001		3	7.6	205			0	0.08	0.55	0.40	0.48	--	--	0.20
03/15/73	5001		12 C	8.0		37AF		83		--	--	0.40	--	0.05	--
1245	5001		3	7.3	254			0	0.07	0.48	--	--	--	--	0.13
03/28/73	5001		12.0C	7.6	265	40AF		83		--	--	0.40	--	0.05	--
1100	5001		3	7.7	246			0	0.07	0.34	--	--	--	--	0.13
04/11/73	5001		16.0C	7.5	350	32AF		93		--	--	0.30	--	0.07	--
1345	5001		3	7.5	352			0	0.03	0.42	--	--	--	--	0.10



TABLE D-5 (CONTINUED)

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY		NUTRIENT ANALYSIS OF SURFACE WATER			NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER										
				PH	EC	TURB F-CO2	CAC03 CAC03	P T	MC03 CO3	NH3	N02 N03	F U	ORG N	N U	F (NH3 + ORG N)	DIS A.M.P04	F U	H3P04 H3P04	F U
E0 B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND																			
CONTINUED																			
04/25/73	5001		16.0C	8.2	445	32AF		89	--	--	0.30					0.06	--		
1200	5001		3	7.7	416			0	0.03	0.23	--	--	--	--	--	--	--	0.10	
05/09/73	5001		18.0C	8.1	1930	33AF		85	--	--	0.10					0.06	--		
1225	5001		3	7.9	2140			0	0.04	0.11	--	--	--	--	--	--	--	0.10	
05/30/73	5001		21.0C	7.8	2500	48AF		70	--	--	0.30					0.07	--		
1640	5001		3	8.5	2550			4	0.06	0.23	--	--	--	--	--	--	--	0.18	
06/12/73	5001		22.0C	7.9	2890	45AF		82	--	--	0.30					0.08	--		
1710	5001		3	8.0	2790			0	0.07	0.32	--	--	--	--	--	--	--	0.15	
06/27/73	5001		23.0C	8.0	6300	31AF		82	--	--	0.30					0.07	--		
1530	5001		3	7.6	6630			0	0.05	0.30	--	--	--	--	--	--	--	0.15	
07/11/73	5001		23.0C	8.1	8571	48AF		87	--	--	0.30					0.08	--		
1530	5001		3	8.2	8800			0	0.05	0.23	--	--	--	--	--	--	--	0.25	
07/31/73	5001		25 C	7.8	370	18AF		73	--	--	0.20					0.06	--		
1340	5001		3					0	0.02	0.03	--	--	--	--	--	--	--	0.14	
08/07/73	5001		20.0C	9.3	8170	37AF		85	--	--	0.40					0.07	--		
1525	5001		3	8.2	8830			0	0.06	0.14	--	--	--	--	--	--	--	0.18	
08/22/73	5001		20.0C	7.9	6920	60AF		86	--	--	0.20					0.07	--		
1220	5001		3	8.0	7460			0	0.03	0.12	--	--	--	--	--	--	--	0.20	
09/05/73	5001		19.0C	8.1	5542	38AF		85	--	--	0.30					0.05	--		
1425	5001		3	8.3	6050			0	0.05	0.15	--	--	--	--	--	--	--	0.17	
09/19/73	5001		20.0C	8.1	1940	50AF		86	--	--	--					--	--		
1050	5001		3	7.8	2110			0	0.07	0.23	--	--	--	--	--	--	--	--	
F0 B 803.5 217.0 SAN PABLO BAY NEAR ROEOO																			
10/04/72	5001		19 C	8.0		6AF		930	--	--	0.200					--	--		
1350	5001		3	7.9	31800			0	0.05	0.14	0.20	0.25	--	--	--	0.08	--	0.11	
11/16/72	5001		14 C	7.8		10AF		101	--	--	0.300					--	--		
1055	5001		3	7.8	24900			0	0.17	0.27	0.30	0.47	--	--	--	0.08	--	0.14	
12/13/72	5001		8 C	7.9		12AF		100	--	--	0.200					--	--		
1005	5001		3	7.9	21100			0	0.16	0.36	0.30	0.46	--	--	--	0.10	--	0.10	
02/14/73	5001		11 C	7.6		50AF		86	--	--	0.400					0.06	--		
1230	5001		3	7.7	5000			0	0.12	0.52	0.40	0.52	--	--	--	--	--	0.12	
04/11/73	5001		16.0C	7.6	15200	10AF		106	--	--	0.20					0.08	--		
1150	5001		3	7.3	17600			0	0.06	0.36	--	--	--	--	--	--	--	0.08	
05/09/73	5001		16.0C	8.0	20700	16AF		112	--	--	--					0.06	--		
1010	5001		3	7.6	23800			0	0.05	0.13	--	--	--	--	--	--	--	0.11	
06/12/73	5001		20.0C	7.9	27800	26AF		112	--	--	0.60					0.10	--		
1510	5001		3	7.8	21800			0	0.10	0.23	--	--	--	--	--	--	--	0.16	
07/11/73	5001		20.0C	7.9	31920	31AF		121	--	--	0.30					0.08	--		
1305	5001		3	7.9	35200			0	0.08	0.36	--	--	--	--	--	--	--	0.13	
08/07/73	5001		19.0C	7.9	33400	17AF		124	--	--	0.40					0.13	--		
1310	5001		3	8.1	37200			0	0.10	0.31	--	--	--	--	--	--	--	0.17	
09/05/73	5001		18.0C	7.8	32500	29AF		121	--	--	0.40					0.11	--		
1210	5001		3	7.9	36300			0	0.11	0.28	--	--	--	--	--	--	--	0.20	
E0 B 803.6 159.3 SUISUN BAY OFF MIDDLE POINT																			
03/28/73	5001		12.0C	7.7	305	33AF		84	--	--	0.40					0.06	--		
1030	5001		3	7.7	279			0	0.05	0.45	--	--	--	--	--	--	--	0.12	
04/25/73	5001		17.0C	8.4	1480	15AF		89	--	--	0.30					0.06	--		
1130	5001		3	7.9	1060			0	0.04	0.45	--	--	--	--	--	--	--	0.06	
05/30/73	5001		21.0C	8.0	6000	46AF		73	--	--	0.40					0.07	--		
1615	5001		3	8.5	6310			5	0.05	0.19	--	--	--	--	--	--	--	0.18	
06/27/73	5001		23.0C	8.0	9200	24AF		86	--	--	0.50					0.09	--		
1505	5001		3	7.5	9200			0	0.06	0.32	--	--	--	--	--	--	--	0.13	
08/22/73	5001		20.0C	7.4	8640	45AF		87	--	--	0.20					0.06	--		
1150	5001		3	8.0	9820			0	0.01	0.07	--	--	--	--	--	--	--	0.17	
09/19/73	5001		19.0C	8.2	3950	45AF		88	--	--	0.20					0.09	--		
1025	5001		3	8.0	4090			0	0.05	0.22	--	--	--	--	--	--	--	0.19	
E0 B 804.0 203.0 SUISUN BAY NEAR PRESTON POINT																			
03/15/73	5001		12 C	7.9		40AF		82	--	--	0.30					0.05	--		
1200	5001		3	7.5	1150			0	0.06	0.43	--	--	--	--	--	--	--	0.12	
03/28/73	5001		12.0C	7.9	690	33AF		80	--	--	0.30					0.06	--		
1005	5001		3	7.8	739			0	0.05	0.44	--	--	--	--	--	--	--	0.13	
04/11/73	5001		16.0C	7.6	1750	39AF		95	--	--	0.20					--	--		
1305	5001		3	7.6	1960			0	0.06	0.45	--	--	--	--	--	--	--	0.08	
04/25/73	5001		16.0C	8.0	6300	26AF		95	--	--	0.40					0.06	--		
1045	5001		3	7.8	7160			0	0.06	0.33	--	--	--	--	--	--	--	0.09	
05/09/73	5001		17.0C	8.0	7640	46AF		95	--	--	0.40					0.06	--		
1140	5001		3	7.7	8860			0	0.10	0.16	--	--	--	--	--	--	--	0.19	
05/30/73	5001		20.0C	8.1	8900	66AF		80	--	--	0.40					0.07	--		
1545	5001		3	8.4	9580			4	0.06	0.19	--	--	--	--	--	--	--	0.26	
06/12/73	5001		21.0C	7.9	11250	37AF		93	--	--	0.20					0.07	--		
1625	5001		3	7.9	10200			0	0.07	0.23	--	--	--	--	--	--	--	0.18	
06/27/73	5001		22.0C	7.9	16250	25AF		96	--	--	0.30					0.09	--		
1440	5001		3	7.6	14500			0	0.07	0.30	--	--	--	--	--	--	--	0.15	



TABLE D-5 (CONTINUED)

NUTRIENT ANALYSIS OF SURFACE WATER														
DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY		FIELD LAB			NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER					
				PH	EC	TURB	CACO3 P	HC03 CO3	NH3	N02 N03	F ORG U ORG	N F (NH3 + U ORG N)	DIS A.H.P04	F H3P04 U H3P04
E0 B 804.0 203.0				SUISUN BAY NEAR PRESTON POINT					CONTINUED					
07/11/73	5001		22.0C	8.3	17240	33AF	100		--	--	0.30		0.08	--
1420	5001		3	8.2	18300		0	0.06	0.13	--	--	--	--	0.20
08/07/73	5001		20.0C	8.4	16400	33AF	90		--	--	0.50		0.07	--
1440	5001		3	8.2	17500		0	0.04	0.10	--	--	--	--	0.19
08/22/73	5001		20.0C	8.0	14080	31AF	95		--	--	0.30		0.08	--
1130	5001		3	7.9	16200		0	0.03	0.07	--	--	--	--	0.13
09/05/73	5001		18.0C	8.1	12600	45AF	92		--	--	0.30		0.04	--
1330	5001		3	8.3	13400		0	0.03	0.10	--	--	--	--	0.18
09/19/73	5001		19.0C	8.1	12120	50AF	93		--	--	0.30		0.09	--
1000	5001		3	7.9	12700		0	0.07	0.18	--	--	--	--	0.28
E0 B 804.4 156.2				MONKER BAY NEAR WHEELER POINT										
10/18/72	5001		18 C	7.6		30AF	84		--	0.300	--		--	--
1410	5001		3	7.6	5700		0	0.08	0.12	0.30	0.38	--	0.05	0.12
11/15/72	5001		13 C	7.7		31AF	73		--	0.400	--		--	--
1055	5001		3	7.6	2860		0	0.11	0.28	0.40	0.51	--	0.07	0.14
12/12/72	5001		6 C	7.8		21AF	74		--	0.300	--		--	--
0845	5001		3	7.7	349		0	0.08	0.35	0.50	0.58	--	0.07	0.10
02/13/73	5001		11 C	8.0		110AF	72		--	0.040	--		0.06	--
1210	5001		3	7.5	178		0	0.07	0.44	0.40	0.47	--	--	0.19
03/15/73	5001		11 C	8.0		50AF	89		--	--	0.14		0.05	--
1230	5001		3	7.5	230		0	0.05	0.35	--	--	--	--	0.12
03/29/73	5001		12.0C	7.7	252	27AF	86		--	--	0.30		0.05	--
1050	5001		3	7.8	236		0	0.06	0.29	--	--	--	--	0.11
04/12/73	5001		15.0C	7.6	403	33AF	92		--	--	0.30		0.07	--
1130	5001		3	7.6	372		0	0.05	0.42	--	--	--	--	0.10
04/26/73	5001		17.0C	8.3	2220	22AF	89		--	--	0.30		0.05	--
1020	5001		3	7.8	1950		0	0.04	0.22	--	--	--	--	0.08
05/10/73	5001		18.0C	8.0	2480	45AF	85		--	--	0.10		0.06	--
1020	5001		3	7.7	2700		0	0.05	0.11	--	--	--	--	0.19
05/31/73	5001		20.0C	7.7	2180	68AF	55		--	--	0.20		0.07	--
1455	5001		3	8.9	1890		13	0.06	0.24	--	--	--	--	0.23
06/13/73	5001		21.0C	7.8	3300	75AF	85		--	--	0.20		0.08	--
1545	5001		3	7.9	3160		0	0.08	0.33	--	--	--	--	0.21
06/26/73	5001		23.0C	7.8	6700	84AF	84		--	--	0.30		0.05	--
1330	5001		3	8.0	6810		0	0.04	0.24	--	--	--	--	0.16
07/11/73	5001		22.0C	8.2	9680	80AF	88		--	--	0.50		0.07	--
1505	5001		3	8.0	10300		0	0.05	0.20	--	--	--	--	0.34
08/08/73	5001		20.0C	8.2	8430	90AF	84		--	--	0.50		0.07	--
1350	5001		3	8.0	9850		0	0.05	0.12	--	--	--	--	0.29
08/23/73	5001		21.0C	7.7	7420	84AF	84		--	--	0.20		0.07	--
1300	5001		3	7.7	8680		0	0.03	0.10	--	--	--	--	0.29
09/06/73	5001		19.0C	8.0	5830	55AF	83		--	--	0.40		0.08	--
1305	5001		3	8.2	5860		0	0.05	0.21	--	--	--	--	0.21
09/20/73	5001		20.0C	8.0	2220	60AF	86		--	--	0.20		0.09	--
1050	5001		3	7.8	2310		0	0.04	0.23	--	--	--	--	0.23
E0 B 805.3 226.3				SAN PABLO BAY NEAR MOUTH OF PETALUMA RIVER										
10/04/72	5001		18 C	7.9		7AF	116		--	0.200	--		--	--
1225	5001		3	8.1	34400		0	0.01	0.03	0.20	0.21	--	0.11	0.12
11/16/72	5001		12 C	7.6		38AF	103		--	0.500	--		--	--
0940	5001		3	7.8	28600		0	0.17	0.40	0.50	0.67	--	0.15	0.20
12/13/72	5001		4 C	7.9		28AF	98		--	0.300	--		--	--
0905	5001		3	7.8	22200		0	0.15	0.44	0.30	0.45	--	0.09	0.11
02/14/73	5001		11 C	7.9		50AF	82		--	0.400	--		0.13	--
1135	5001		3	7.8	6500		0	0.21	0.75	0.50	0.71	--	--	0.18
04/11/73	5001		17.0C	7.9	18200	26AF	106		--	--	0.10		0.07	--
1010	5001		3	7.4	20500		0	0.01	0.19	--	--	--	--	0.10
05/09/73	5001		16.0C	8.3	26500	21AF	117		--	--	0.00		0.02	--
0845	5001		3	7.6	30700		0	0.00	0.01	--	--	--	--	0.15
06/12/73	5001		21.0C	7.9	27800	60AF	112		--	--	0.10		0.11	--
1350	5001		3	7.7	31400		0	0.03	0.05	--	--	--	--	0.22
07/10/73	5001		21.0C	8.0	36000	78AF	124		--	--	0.30		0.16	--
1325	5001		3	7.8	37900		0	0.07	0.47	--	--	--	--	0.35
08/07/73	5001		20.0C	7.7	33500	20AF	129		--	--	0.50		0.16	--
1200	5001		3	7.7	39500		0	0.06	0.39	--	--	--	--	0.21
09/05/73	5001		18.0C	7.8	34700	65AF	123		--	--	0.30		0.10	--
1050	5001		3	7.8	38400		0	0.03	0.26	--	--	--	--	0.28
E0 B 807.0 202.3				GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH										
10/18/72	5001		18 C	7.5		27AF	90		--	0.300	--		--	--
1215	5001		3	7.3	10800		0	0.08	0.12	0.40	0.48	--	0.04	0.12
11/15/72	5001		14 C	7.1		45AF	79		--	0.400	--		--	--
1010	5001		3	7.0	6780		0	0.16	0.28	0.50	0.66	--	0.07	0.20
12/12/72	5001		6 C	7.1		38AF	77		--	0.400	--		--	--
0800	5001		3	7.7	2840		0	0.13	0.39	0.50	0.63	--	0.08	0.11



TABLE D-5 (CONTINUED)

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	LABORATORY PH	FIELD EC	NUTRIENT ANALYSIS OF SURFACE WATER												
						TURB	CACO3	P	MC03	NH3	N02	F	ORG N	F (NH3 + U ORG N)	DIS A.H.P04	F H3P04 U H3P04	F TOT P U TOT P	
E0 B 807.0 202.3 GRIZZLY BAY AT DOLPHIN NEAR SUISUN SLOUGH CONTINUED																		
02/13/73	5001		11 C	7.4														
1130	5001		3	7.8	180	100AF		76					0.300			0.06		
								0	0.08				0.50	0.58			0.22	
03/15/73	5001		11 C	7.5														
1005	5001		3	7.6	222	83AF		83									0.05	
								0	0.04									0.12
03/29/73	5001		12.0C	7.7														
1000	5001		3	7.6	320	55AF		86										0.06
					292			0	0.05					0.40				0.15
04/12/73	5001		16.0C	7.7														
1040	5001		3	7.6	1210	55AF		93										0.07
					1120			0	0.07					0.30				0.10
04/26/73	5001		17.0C	8.0														
0940	5001		3	7.7	4920	26AF		95										0.04
					5450			0	0.04									0.08
05/10/73	5001		17.0C	8.0														
0935	5001		3	7.7	5400	50AF		89										0.07
					5820			0	0.09					0.20				0.20
05/31/73	5001		20.0C	7.9														
1415	5001		3	7.7	7600	76AF		82										0.07
					8130			0	0.05					0.30				0.27
06/13/73	5001		20.0C	7.8														
1345	5001		3	7.9	7330	37AF		90										0.08
					8000			0	0.12					0.50				0.16
06/27/73	5001		23.0C	7.6														
1330	5001		3	7.5	12600	37AF		83										0.06
					13100			0	0.04					0.30				0.18
08/08/73	5001		19.0C	8.0														
1145	5001		3	8.0	13600	80AF		92										0.06
					15200			0	0.03					0.40				0.30
09/06/73	5001		18.0C	8.0														
1050	5001		3	8.0	9040	45AF		86										0.08
					9340			0	0.03					0.30				0.19
09/19/73	5001		19.0C	7.9														
0850	5001		3	7.9	6348	50AF		89										0.08
					7090			0	0.04					0.20				0.25
E0 S 809.2 205.3 CORDELIA SLOUGH AT CYGNUS																		
11/14/72	5001		11 C	7.1														
0940	5001		3		5250	34AF												
					4350				.20				.23	1.30	1.5			.03
01/29/73	5001		8 C	7.0														
1010	5001		3		998	80AF			.17				.46	.60				.04
														.80	0.97			.14
02/26/73	5001		13 C	7.4														
1045	5001		3		1020	70AF			.14				.46	.50				.04
														.80	0.94			.17
03/27/73	5001		13 C	7.2														
0920	5001		3	7.3	1780	40AF		114										.03
					1810			0	.16					.45				.15
04/26/73	5001		19 C	7.7														
0905	5001		3	7.8	1290	75AF		100										.05
					1330			0	.02					.29				.18
05/24/73	5001		19 C	7.9														
0920	5001		3	7.8	5800	42AF		97										.04
					6530			0	.01					.15				.19
06/25/73	5001		24 C	7.5														
1125	5001		3	7.8	6600	44AF		96										.06
					6730			0	.04					.30				.23
07/23/73	5001		19 C	7.9														
0940	5001		3	7.9	12980	33AF		100										.04
					13600			0	0.03					0.03				.16
08/20/73	5001		20.0C	6.8														
0845	5001		3	7.8	11600	55AF		91										.04
					13200			0	0.03					0.04				.23
09/18/73	5001		19 C	7.9														
0940	5001		3	7.9	9600	62AF		96										.05
					9730			0	0.05					0.05				.23
F0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND																		
11/14/72	5001		12 C	7.4														
1330	5001		3		8020	70AF												
					7270				.32					.42	1.20	1.52		.18
02/13/73	5001		11 C	6.8														
1040	5001		3	7.7	945	65AF		102										.05
								0	.26					.60				.21
02/26/73	5001		13 C	7.5														
1415	5001		3		1090	80AF			.16					.50				.06
														.90	1.06			.27
03/27/73	5001		14 C	7.3														
1305	5001		3	7.4	1720	32AF		162										.07
					1750			0	.23					.75				.20
04/12/73	5001		17.0C	7.4														
0950	5001		3	7.7	1330	75AF		114										.05
					1310			0	.12					.53				.13
04/26/73	5001		20 C	8.1														
1310	5001		3	7.8	1660	60AF		142										.07
					1690			0	.03					.62				.22
05/10/73	5001		18.0C	7.7														
0845	5001		3	7.7	3700	70AF		114										.05
					4050			0	0.10					.83				.27
05/24/73	5001		19 C	8.3														
1340	5001		3	8.0	3880	60AF		148										.07
					4250			0	.02					.10				.40
06/13/73	5001		21.0C	7.7														
1230	5001		3	7.9	4700	75AF		122										.06
					4540			0	.10					.20				.30
06/25/73	5001		24 C	7.9														
1455	5001		3	7.9	5900	38AF		127		</								

TABLE 0-5 (CONTINUED)  
NUTRIENT ANALYSIS OF SURFACE WATER

DATE TIME	SAMP LAB	G.H. DISCH.	TEMP DEPTH	FIELD LABORATORY		FIELD TURB CAC03 P			LAB HCO3 NH3		NUTRIENT CONSTITUENTS IN MILLIGRAMS PER LITER						
				PH	EC	F-CO2	CAC03	T	CO3	NO2	F ORG N	F (NH3 + U ORG N)	DIS A.H.PO4	F H3PO4 U H3PO4	F TOT P U TOT P		
E0 S 810.8 202.8 SUISUN SLOUGH AT VOLANTI SLOUGH ON JOICE ISLAND CONTINUED																	
09/18/73	5001		20	C	8.1	10000		33AF		119		--	--	0.30		0.07	--
1235	5001		3		8.0	10200				0	0.03	0.02	--	--	--	--	0.24
E0 S 811.0 204.8 CHADBOURNE SLOUGH AT CHADBOURNE ROAD																	
11/14/72	5001		11	C	7.1	800		950AF				--	--	--		--	--
1230	5001		3			466					.29	.94	2.60	2.89	--	.05	.44
01/29/73	5001		8	C				60AF				--	.90	--		--	--
1150	5001		3			1400					.30	.73	.90	1.2	--	.05	.15
02/26/73	5001		13	C	7.3			21AF				--	.30	--		.02	--
1300	5001		3			949					.20	1.40	.60	0.8	--	--	.07
03/27/73	5001		15	C	7.3	1320		30AF		171		--	--	.60		.02	--
1135	5001		3		7.4	1340				0	.21	.95	--	--	--	--	.10
04/26/73	5001		22	C	8.1	1520		50AF		148		--	--	.80		.02	--
1155	5001		3		7.8	1550				0	.02	.40	--	--	--	--	.17
05/24/73	5001		20	C	7.8	3900		60AF		144		--	--	.60		.01	--
1140	5001		3		8.0	4290				0	.09	.40	--	--	--	--	.24
06/25/73	5001		23	C	7.6	6500		37AF		108		--	--	.30		.03	--
1320	5001		3		7.8	6300				0	.06	.11	--	--	--	--	.19
06/25/73	5001		22	C	8.0	4600		34AF		149		--	--	.50		.02	--
1545	5001		1		8.2	4330				0	.03	.49	--	--	--	--	.15
07/23/73	5001		20	C	7.7	8928		32AF		129		--	--	0.30		0.02	--
1215	5001		3		8.0	10200				0	0.04	0.25	--	--	--	--	0.16
08/20/73	5001		19	OC	7.3	10300		40AF		95		--	--	0.50		0.01	--
1130	5001		3		7.7	12800				0	0.03	0.05	--	--	--	--	0.15
09/18/73	5001		18	C	7.6	10000		30AF		100		--	--	0.30		0.02	--
1125	5001		3		7.7	9730				0	0.12	0.09	--	--	--	--	0.12
E0 S 811.2 158.5 MONTEZUMA SLOUGH AT GRIZZLY ISLAND ROAD																	
11/14/72	5001		13	C	7.4			25AF				--	--	--		--	--
1435	5001		3			7270					.28	.17	1.00	1.28	--	.03	.12
01/29/73	5001		8	C				75AF				--	.80	--		--	--
1335	5001		3			1070					.16	.44	1.00	1.16	--	.03	.14
02/26/73	5001		13	C	7.4			55AF				--	.40	--		.03	--
1520	5001		3			632					.13	.33	.50	0.63	--	--	.13
03/27/73	5001		13	C	7.1	950		27AF		95		--	--	.60		.03	--
1405	5001		3		7.3	962				0	.10	.35	--	--	--	--	.11
04/26/73	5001		20	C	8.0	1660		55AF		123		--	--	.80		.02	--
1405	5001		3		7.6	1690				0	.03	.22	--	--	--	--	.16
05/24/73	5001		19	C	7.8	3320		40AF		104		--	--	.70		.02	--
1440	5001		3		7.8	3680				0	.07	.14	--	--	--	--	.21
06/25/73	5001		23	C	7.8	5600		29AF		105		--	--	.40		.03	--
1543	5001		3		7.9	5160				0	.05	.10	--	--	--	--	.16
07/23/73	5001		20	C	8.0	8109		22AF		106		--	--	0.30		0.02	--
1430	5001		3		8.1	8870				0	0.01	0.02	--	--	--	--	0.14
08/20/73	5001		22	OC	7.8	9800		24AF		110		--	--	0.40		0.03	--
1350	5001		3		7.9	10300				0	0.02	0.03	--	--	--	--	0.13
09/18/73	5001		20	C	8.0	10700		30AF		101		--	--	0.40		0.03	--
1315	5001		3		8.2	10400				0	0.03	0.01	--	--	--	--	0.13
E0 S 811.5 207.2 CORDELIA SLOUGH AT UPPER END																	
03/27/73	5001		14	C	7.7	575		32AF		170		--	--	.30		.05	--
1025	5001		3		7.8	597				0	.05	.45	--	--	--	--	.10
04/26/73	5001		21	C	9.1	1070		18AF		201		--	--	.40		.02	--
1055	5001		1		8.2	1130				0	.01	.03	--	--	--	--	.10
05/24/73	5001		20	C	8.2	4750		75AF		163		--	--	.40		.07	--
1020	5001		2		8.5	4580				4	.06	.21	--	--	--	--	.28
06/25/73	5001		22	C	7.8	3100		65AF		180		--	--	.50		.03	--
1210	5001		3		8.1	2870				0	.04	.02	--	--	--	--	.25
07/23/73	5001		20	C	8.1	593		60AF		173		--	--	0.20		0.05	--
1100	5001		3		8.5	669				5	0.03	0.10	--	--	--	--	0.23
08/20/73	5001		20	OC	7.6	6200		65AF		168		--	--	0.60		0.02	--
1015	5001		3		8.0	7060				0	0.02	0.07	--	--	--	--	0.25
09/18/73	5001		19	C	8.2	550		84AF		170		--	--	0.40		0.04	--
1030	5001		2		8.5	527				0	0.15	0.07	--	--	--	--	0.15
E0 S 813.6 201.2 HILL SLOUGH AT GRIZZLY ISLAND ROAD																	
11/14/72	5001		11	C	7.4			120AF				--	--	--		--	--
1515	5001		3			834					.89	.46	1.40	2.29	--	.62	.77
01/29/73	5001		8	C				55AF				--	.90	--		--	--
1415	5001		3			1160					.34	.68	1.20	1.54	--	.16	.33
02/26/73	5001		13	OC	7.5			32AF				--	1.00	--		.21	--
1545	5001		3			1870					.29	.66	1.20	1.49	--	--	.50
03/27/73	5001		15	C	7.5	990		45AF		194		--	--	.60		.14	--
1440	5001		3		7.7	1010				0	.12	.30	--	--	--	--	.30
04/26/73	5001		21	C	8.3	2540		60AF		263		--	--	1.10		.29	--
1453	5001		3		8.0	2570				0	.02	1.15	--	--	--	--	.71





TABLE D-6

PESTICIDES IN SURFACE WATER

Sampler and Lab Agency Codes

- 5001 - U. S. Bureau of Reclamation
- 5050 - Department of Water Resources

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
- TEMP - Water temperature at time of sampling in degrees Fahrenheit (F) and Celsius (C)
- EC - Electrical conductance in micromhos at 25°C
- DO - Dissolved oxygen content in milligrams per liter
- PH - Measure of acidity (<7) or alkalinity (>7) of water
- DEPTH - Depth in feet at which sample was collected
- DISCHARGE - Instantaneous discharge in cubic feet per second

Pesticides

Chlorinated Hydrocarbons

- | <u>Code</u> | <u>Most Common Name</u>  |
|-------------|--|
| CAPTAN      | - CAPTAN   |
| DACTHAL     | - DACTHAL  |
| DDT         | - DDT (Code includes all Isomers; Para Para etc.)                        |
| DIELDRIN    | - DIELDRIN   |
| UNKNOWN     | - Complex chlorinated compound mixture as (Reported as DDT), one or more |
| NONE        |  |
| DETECTED    | - No detectable amount of Chlorinated Hydrocarbons                       |

Organic Phosphorus

- ORGANIC P - Organic Phosphorus compounds as Parathion
- UNKNOWN - Complex mixture as Parathion (Reported as Parathion), one or more
- NONE
- DETECTED - No detectable amount of organic phosphorus.



TABLE D-6 (CONTINUED)  
 PESTICIDES IN SURFACE WATER  
 COMPOUNDS REPORTED IN NANOGRAMS/LITER

DATE TIME	SAMP LAB	TEMP EC	DO PH	G.H. DEP DISCHARGE	COMPOUNDS REPORTED IN NANOGRAMS/LITER			
					CHLORINATED HYDROCARBON	ORGANIC PHOSPHORUS	OTHER	
02 1006.60 MERRITT LAKE DRAIN AT PUMP								
08/14/73	5050	70 F	7.6		450 DDT	NONE DETECTED		
0930	5050	2890	8.0					
D2 1030.30 BLANCO DRAIN AT PUMP LIFT								
08/14/73	5050	65 F	8.2		40 CAPTAN	150 UNKNOWNNS	55 ORGANICP	55 UNKNOWNNS
0800	5050	2380	8.2					
E0 B 735.0 215.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNFL)								
11/27/72	5050	57 F	7.8		NONE DETECTED			
1230	5050	38000	7.9					
01/23/73	5050	49 F	9.7		NONE DETECTED			
1130	5050	28000	7.9					
03/20/73	5050	53 F	9.2		NONE DETECTED			
0915	5050	26000	8.1					
05/03/73	5050	60 F	8.8		30 UNKNOWNNS			
0810	5050	33000	8.2					
07/30/73	5050	69 F	6.6		70 UNKNOWNNS			
0830	5050	41000	8.1					
09/13/73	5050	66 F	6.9		110 UNKNOWNNS			
0810	5050	44000	8.2					
E0 B 736.2 212.0 SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)								
11/27/72	5050	57 F	8.2		NONE DETECTED			
1330	5050	40000	8.1					
01/23/73	5050	49 F	9.1		NONE DETECTED			
1220	5050	32000	7.9					
03/20/73	5050	53 F	9.6		NONE DETECTED			
1015	5050	26000	8.0					
05/03/73	5050	60 F	9.0		40 UNKNOWNNS			
0900	5050	34000	8.2					
07/30/73	5050	70 F	6.3		70 UNKNOWNNS			
0930	5050	43000	8.1					
09/13/73	5050	64 F	7.0		130 UNKNOWNNS			
0910	5050	45000	8.2					
E0 B 749.2 222.4 SAN FRANCISCO BAY AT TPEASURE ISLAND								
11/27/72	5050	56 F	8.1		NONE DETECTED			
1100	5050	37500	7.9					
01/23/73	5050	48 F	9.8		NONE DETECTED			
1000	5050	15000	7.8					
03/20/73	5050	52 F	9.0		NONE DETECTED			
0730	5050	34000	8.1					
05/03/73	5050	56 F	8.2		20 UNKNOWNNS			
0645	5050	41000	8.2					
07/30/73	5050	63 F	6.5		80 UNKNOWNNS			
0700	5050	44000	8.0					
09/13/73	5050	62 F	7.4		20 DACTHAL	100 UNKNOWNNS		
0640	5050	45000	8.1					
E0 B 802.7 207.0 SUISUN BAY OFF BULLS HEAD POINT NEAR MARTINES								
01/15/73	5001	8 C	10.5		3 NONE DETECTED			
1050	5050		7.3					
02/14/73	5001	11 C	9.8		3 NONE DETECTED			
1315	5050		7.6					
05/09/73	5001	17.0C	9.0		3 20 UNKNOWNNS			
1110	5050	12350	7.9					
09/05/73	5001	18.0C	8.1		3 30 UNKNOWNNS	20 DACTHAL		
1305	5050	21840	8.0					
E0 B 802.8 155.0 SACRAMENTO RIVER AT CHIPPS ISLAND								
05/09/73	5001	18.0C	9.3		3 5 DACTHAL	20 UNKNOWNNS		
1225	5050	1930	8.1					
09/05/73	5001	19.0C	8.6		3 NONE DETECTED			
1425	5050	5542	8.1					
E0 B 803.5 217.0 SAN PABLO BAY NEAR RODEO								
05/09/73	5001	16.0C	8.8		3 15 UNKNOWNNS			
1010	5050	20700	8.0					
09/05/73	5001	18.0C			3 20 UNKNOWNNS			
1210	5050	32500	7.8					
E0 B 804.0 203.0 SUISUN BAY NEAR PRESTON POINT								
05/09/73	5001	17.0C	9.2		3 5 DACTHAL	15 UNKNOWNNS		
1140	5050	7640	8.0					
09/05/73	5001	18.0C	8.4		3 NONE DETECTED			
1330	5050	12600	8.1					
E4 L 748.1 215.6 LAKE MERRITT AT BOATHOUSE DOCK								
12/11/72	5050	44 F	12.1		45 UNKNOWNNS			
1345	5050	13000	8.9					
03/20/73	5050	56 F	9.3		75 UNKNOWNNS	10 DACTHAL		
1150	5050	6000	9.0		5 DIELDRIN			
06/18/73	5050	71 F	10.0		NONE DETECTED			
1230	5050	3700	8.5					
09/13/73	5050	68 F	6.8		100 UNKNOWNNS			
1020	5050	42000	8.5					

TABLE D-7 (Cont.)

## DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

DO 1180.01 SAN LORENZO RIVER AT PARADISE PARK  
(October 1, 1972, through September 30, 1973)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	390	370	380	400	390	395	360	360	360	355	350	350	278	260	272			
2	370	365	370	395	390	395	360	360	360	355	350	350	288	278	284			
3	370	360	365	395	385	390	360	330	355	355	350	350	290	103	236			
4	365	360	360	390	260	335	350	280	320	360	350	355	131	106	122			
5	370	360	370	405	360	380	350	345	345	350	350	350	144	131	140			
6	370	370	370	370	360	365	345	250	300	350	350	350	145	75	103			
7	380	370	375	375	330	360	290	274	280	350	345	350	108	76	95			
8	385	380	380	380	345	370	305	285	298	350	155	298	141	107	121			
9	380	360	375	385	370	375	310	305	310	184	132	155	150	112	137			
10	380	345	355	370	262	322	310	300	305	198	146	175	115	73	92			N
11	400	365	390	340	278	290	325	320	320	222	198	210	120	86	104			O
12	420	355	390	330	284	310	330	325	325	210	200	204	NR	NR	NR			
13	380	360	375	345	85	310	330	325	330	230	210	222	NR	NR	NR			
14	390	340	370	230	193	215	340	330	335	242	230	238	NR	NR	NR			
15	345	310	335	254	197	233	345	335	340	248	242	246	NR	NR	NR			R
16	345	296	325	260	197	233	340	335	335	248	55	137	NR	NR	NR			E
17	310	250	282	289	260	277	340	320	330	98	59	84	NR	NR	NR			
18	340	310	325	300	289	297	350	330	340	104	58	80	NR	NR	NR			C
19	365	340	360	313	300	309	330	300	315	NR	NR	NR	NR	NR	NR			
20	380	360	370	315	315	315	340	330	335	NR	NR	NR	NR	NR	NR			O
21	390	375	385	330	315	325	350	335	345	NR	NR	NR	NR	NR	NR			R
22	400	390	395	335	330	330	345	320	335	NR	NR	NR	NR	NR	NR			
23	400	390	395	335	335	335	335	330	335	NR	NR	NR	NR	NR	NR			D
24	405	395	400	345	335	340	330	330	330	NR	NR	NR	NR	NR	NR			
25	410	400	405	350	345	350	335	330	335	NR	NR	NR	NR	NR	NR			
26	400	400	400	350	335	345	335	330	330	NR	NR	NR	NR	NR	NR			
27	405	400	400	355	350	355	350	330	345	NR	NR	NR	NR	NR	NR			
28	420	405	410	360	355	360	360	355	355	250	240	245	NR	NR	NR			
29	410	395	400	360	360	360	355	350	355	255	220	230						
30	395	390	390	360	360	360	355	350	350	235	285	215						
31	400	390	395				355	350	350	260	235	250						

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1										NR	NR	NR	355	340	345	350	345	350
2										NR	NR	NR	355	335	345	355	345	350
3										350	335	340	350	325	340	350	340	345
4										350	340	345	340	325	335	350	340	345
5										350	340	345	340	325	330	350	340	345
6										350	340	345	335	325	330	350	345	350
7										350	335	340	335	320	330	355	345	350
8										345	330	340	340	325	330	355	350	350
9										340	325	335	340	325	330	360	350	355
10		N			N			N		340	325	335	340	325	335	350	345	350
11		O			O			O		340	325	335	340	325	335	350	345	350
12										340	320	330	335	320	325	350	345	350
13										340	320	320	330	320	325	350	345	345
14										335	320	330	330	320	325	350	350	350
15		R			R			R		340	320	330	330	320	325	350	350	350
16		E			E			E		340	315	330	340	325	335	355	350	350
17										340	315	335	340	325	330	350	345	350
18		C			C			C		340	315	335	340	320	330	355	350	350
19										335	310	330	335	320	330	355	350	350
20		O			O			O		340	315	330	335	325	330	355	350	355
21		R			R			R		340	315	325	335	325	330	355	350	355
22										340	315	330	335	325	330	355	350	355
23		D			D			D		340	310	330	335	325	330	350	350	350
24										340	315	330	335	320	330	350	350	350
25										340	310	325	335	325	330	360	350	355
26										340	315	330	335	325	330	375	360	370
27										340	310	330	335	325	330	375	360	370
28										340	315	330	340	330	335	360	360	360
29										340	335	335	345	335	340	360	360	360
30										350	345	345	345	335	340	370	360	365
31													350	345	350			

NR - No Record.



TABLE D-7 (Cont.)

## DAILY MAXIMUM, MINIMUM, AND AVERAGE SPECIFIC CONDUCTANCE

F9 1100.00 RUSSIAN RIVER NEAR GUERNEVILLE  
(October 1972 through September 1973)

(In Micromhos at 25° C)

Day	October			November			December			January			February			March		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	335	270	280	280	280	280	255	245	250	265	260	265	220	210	215	188	166	180
2	275	265	270	280	280	280	250	245	250	270	265	265	230	220	225	204	188	196
3	275	270	275	NR	NR	NR	250	245	250	270	270	270	235	230	235	208	180	200
4	275	250	270	NR	NR	NR	250	245	250	270	270	270	235	152	202	193	180	183
5	285	265	280	290	265	275	250	245	245	275	270	270	152	133	139	208	193	202
6	295	285	290	295	290	290	245	190	220	275	275	275	164	145	158	208	172	190
7	290	285	290	340	250	290	215	190	200	280	275	275	149	139	142	197	173	185
8	285	275	280	270	250	260	215	215	215	280	168	250	174	149	164	198	190	195
9	280	270	275	280	270	275	220	215	220	168	107	123	185	174	179	215	198	205
10	300	270	280	290	240	265	225	220	225	143	106	134	169	140	148	220	215	215
11	300	260	285	230	210	220	230	225	225	155	87	120	164	143	152	215	215	215
12	260	245	255	239	225	235	230	230	230	98	86	92	178	164	174	225	215	220
13	260	255	255	250	123	170	235	230	235	130	98	115	180	161	170	230	225	225
14	NR	NR	NR	180	125	140	235	235	235	162	130	145	184	164	174	235	230	230
15	NR	NR	NR	186	157	180	235	235	235	175	156	168	179	164	174	NR	NR	NR
16	290	250	270	163	144	154	235	230	235	156	97	106	183	179	181	NR	NR	NR
17	300	255	280	184	161	174	NR	NR	NR	135	96	115	194	183	189	NR	NR	NR
18	310	295	305	200	184	194	NR	NR	NR	135	107	115	200	194	196	NR	NR	NR
19	310	300	305	210	200	206	NR	NR	NR	151	113	133	204	200	201	NR	NR	NR
20	300	298	300	215	210	210	NR	NR	NR	171	151	162	209	204	206	NR	NR	NR
21	298	295	295	220	215	220	NR	NR	NR	174	171	172	215	208	210	NR	NR	NR
22	295	295	295	230	220	225	210	190	201	185	171	180	254	215	230	NR	NR	NR
23	295	290	290	235	230	235	205	187	295	190	185	188	263	248	253	NR	NR	NR
24	290	290	290	255	235	245	215	205	210	206	190	197	263	140	198	NR	NR	NR
25	290	290	290	255	250	250	220	210	215	215	200	206	160	142	150	NR	NR	NR
26	290	285	290	260	250	255	235	220	230	230	215	225	172	147	162	NR	NR	NR
27	285	285	285	260	255	260	240	235	240	240	230	235	160	148	156	NR	NR	NR
28	285	282	285	255	255	255	240	240	240	250	240	245	166	157	161	NR	NR	NR
29	285	282	283	255	255	255	250	240	245	250	190	235	NR	NR	NR	NR	NR	NR
30	282	280	280	255	255	255	260	250	255	190	172	178	NR	NR	NR	NR	NR	NR
31	280	280	280	NR	NR	NR	260	255	260	210	185	202	NR	NR	NR	NR	NR	NR

Day	April			May			June			July			August			September		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
1	NR	NR	NR	295	295	295	345	330	335	280	270	270	250	240	245	270	260	265
2	NR	NR	NR	300	295	295	340	330	335	285	265	275	250	240	245	270	260	265
3	NR	NR	NR	295	290	295	340	325	335	320	280	295	250	240	245	270	260	265
4	NR	NR	NR	295	290	295	335	320	325	285	270	275	250	240	245	265	255	260
5	NR	NR	NR	300	285	295	330	310	325	280	270	270	255	245	250	270	265	270
6	NR	NR	NR	290	285	285	330	315	320	280	265	275	255	250	255	275	265	270
7	NR	NR	NR	285	285	285	330	320	325	275	255	265	255	250	255	275	265	270
8	NR	NR	NR	290	285	285	340	320	325	270	260	265	255	255	255	275	265	270
9	NR	NR	NR	290	285	285	340	315	325	275	265	270	255	245	255	275	260	265
10	NR	NR	NR	290	285	285	330	315	325	275	260	265	260	250	255	275	270	270
11	NR	NR	NR	290	290	290	330	315	325	270	260	265	260	245	255	275	265	270
12	285	280	285	290	285	285	330	310	320	265	255	260	260	250	255	265	260	260
13	295	260	285	290	285	285	325	310	315	260	250	255	260	250	255	275	260	270
14	295	280	285	290	285	285	310	305	310	260	250	255	260	245	255	340	270	300
15	295	290	290	290	285	285	NR	NR	NR	255	250	255	260	250	255	NR	NR	NR
16	295	295	295	310	290	295	NR	NR	NR	255	250	255	260	245	255	NR	NR	NR
17	305	295	300	325	310	315	310	295	305	255	250	255	260	245	255	NR	NR	NR
18	315	305	305	340	325	330	305	295	300	260	250	255	260	250	255	NR	NR	NR
19	315	315	315	345	340	340	300	270	285	265	260	265	260	245	255	NR	NR	NR
20	320	315	315	345	340	345	290	280	285	270	265	270	260	250	255	NR	NR	NR
21	320	315	315	345	335	340	295	285	290	270	265	270	260	250	250	NR	NR	NR
22	315	310	315	345	345	345	290	280	285	275	265	270	260	245	255	NR	NR	NR
23	310	305	305	345	335	340	290	280	285	275	270	275	255	245	250	NR	NR	NR
24	305	305	305	395	345	370	280	270	275	275	270	275	260	250	255	335	295	310
25	305	305	305	385	335	350	280	270	280	275	270	275	270	255	260	310	285	295
26	310	305	305	340	330	335	280	270	275	270	260	265	270	255	265	315	290	300
27	310	310	310	340	330	335	275	265	270	265	250	255	265	255	260	300	295	300
28	310	305	305	335	330	330	290	275	280	260	255	260	265	250	260	310	300	305
29	305	285	295	330	320	325	275	265	270	260	250	255	260	245	255	315	305	310
30	300	295	295	335	320	330	280	270	275	260	250	255	265	260	265	310	300	305
31				345	330	335	250	240	245	270	255	265	270	255	265			

NR - No Record

TABLE D-8

## PHYTOPLANKTON ANALYSIS OF SURFACE WATER

Codes and Abbreviations

<u>Total</u>	- Total phytoplankton per milliliter
<u>Bl-Gr</u>	- Blue-Green Algae
<u>Green</u>	- Green Algae
<u>Flag</u>	- Flagellates
<u>C/P</u>	- Centric over Pennate
<u>Samp</u>	- 5050 - Department of Water Resources
<u>Lab</u>	- 5050 - Department of Water Resources Laboratory

Most Abundant PhytoplanktonGreen Algae

G 02	Ankistrodesmus
G 14	Pediastrum
G 19	Schroderia
G 20	Elakatothrix
G 22	Selenastrum

Flagellates

F 07	Phacus
F 08	Trachelomonas
F 56	Cryptomonas
F 59	Glenodinium
F 99	Unidentified

DiatomsCentric

D 02	Coscinodiscus
D 03	Cyclotella
D 04	Melosira (salt water)
D 06	Stephanodiscus

Pennate

D 50	Unidentified
D 57	Cocconeis
D 62	Fragilaria
D 64	Gyrosigma
D 65	Navicula
D 66	Nitzschia
D 69	Surirella
D 70	Synedra



TABLE D-8 (Cont.)

## PHYTOPLANKTON ANALYSIS OF SURFACE WATER

Station Number	Station	Date Time	Phytoplankton (number per milliliter)					Most Abundant Phytoplankton (genus %)						Samp	Lab		
			Total	Bl-Gr	Green	Flag	Diatoms C P	1	2	3	4	5	6				
EO B 735.0 215.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (SHIP CHANNEL)	10-11-72 0930	316				284	0 32	F 99 89.9	D 65 10.1						5050	5050
		11-27-72 1230	610				610		F 99 73.8	F 56 26.2						5050	5050
		12-11-72 1115	706				674	0 32	F 99 86.4	F 56 9.1	D 65 4.5					5050	5050
		01-23-73 1130	734				670	64 0	F 99 73.6	F 56 17.7	D 03 8.7					5050	5050
		02-06-73 1030	1032				1032		F 99 96.9	F 56 3.1						5050	5050
		03-20-73 0915	674				482	64 128	F 99 66.8	D 65 14.2	D 03 9.5	F 56 4.7	D 70 4.7			5050	5050
		04-05-73 0915	1360				1200	32 128	F 99 88.2	D 70 7.0	D 03 2.4	D 62 2.4				5050	5050
		05-03-73 0810	992				832	128 32	F 99 80.6	D 03 9.7	F 56 3.2	D 03 3.2	D 66 3.2			5050	5050
		06-18-73 1000	130				130		F 99 100							5050	5050
		07-30-73 0830	190				190		F 99 100							5050	5050
		08-14-73 0920	0													5050	5050
		09-13-73 0810	96				96		F 99 100							5050	5050
EO B 736.2 212.0	SAN FRANCISCO BAY AT SAN MATEO BRIDGE (PIER 662)	10-11-72 1100	386				386		F 99 100						5050	5050	
		11-27-72 1330	576				576		F 99 83.3	F 56 16.7					5050	5050	
		12-11-72 1200	636				636		F 99 84.9	F 56 15.1					5050	5050	
		01-23-73 1220	260				260		F 99 100						5050	5050	
		02-06-73 1100	1196				1100	64 32	F 99 92.0	D 03 5.4	D 65 2.6				5050	5050	
		03-20-73 1015	574				380	130 64	F 99 66.2	D 03 22.6	D 65 11.2				5050	5050	
		04-05-73 1005	1658				1432	130 96	F 99 84.5	D 03 7.9	F 56 1.9	D 62 1.9	D 65 1.9	D 70 1.9	5050	5050	
		05-03-73 0900	2428				2396	0 32	F 99 94.7	F 56 4.0	D 50 1.3				5050	5050	
		06-18-73 1045	416				384	0 32	F 99 76.9	F 56 15.4	D 66 7.7				5050	5050	
		07-30-73 0930	190				190		F 99 100						5050	5050	
		08-14-73 1000	0												5050	5050	
		09-13-73 0910	96			64	32		G 20 66.7	F 08 33.3					5050	5050	
EO B 749.2 222.4	SAN FRANCISCO BAY AT TREASURE ISLAND	10-11-72 0850	450				450		F 99 100						5050	5050	
		11-27-72 1100	356				260	0 96	F 99 73.0	D 65 18.0	D 57 9.0				5050	5050	
		12-11-72 1000	740				708	0 32	F 99 78.4	F 56 13.0	F 07 4.3	D 64 4.3			5050	5050	
		01-23-73 1000	386				290	32 64	F 99 75.1	D 04 8.3	D 62 8.3	D 65 8.3			5050	5050	
		02-06-73 0840	992		64	800		96 32	F 99 80.6	G 02 3.3	G 14 3.3	D 02 3.2	D 03 3.2	D 06 3.2	5050	5050	
		03-20-73 0730	578		32	450		96 0	F 99 77.9	D 03 11.1	G 22 5.5	D 02 5.5			5050	5050	
		04-05-73 0800	1488		32	1200		128 128	F 99 80.6	D 03 6.5	D 65 4.3	G 02 2.2	D 02 2.2	D 57 2.1	5050	5050	
		05-03-73 0645	1258			1032		226 0	F 99 79.5	D 03 10.3	D 02 5.1	F 56 2.5	D 65 2.5		5050	5050	
		06-18-73 0845	290			290			F 99 100						5050	5050	
		07-30-73 0700	194		32	130		0 32	F 99 67.0	G 19 16.5	D 69 16.5				5050	5050	
		08-14-73 0755	64		32			32 0	G 02 50.0	D 03 50.0					5050	5050	
		09-13-73 0640	476			476			F 99 79.8	F 59 13.5	F 56 6.7				5050	5050	

## APPENDIX E

### GROUND WATER QUALITY DATA

This appendix presents ground water quality data collected during the period from October 1, 1972, through September 30, 1973. The data were collected from a number of major ground water sources in the Central Coastal Area in cooperation with other state, local, and federal agencies. During the 1973 water year, 226 wells were sampled in 34 ground water basins and subbasins or subareas.

At the time of field sampling, pH and temperature measurements are normally made. Comments on current conditions are noted in field books which are available in the files of the Department of Water Resources.

Laboratory analyses of ground waters were performed in accordance with "Standard Methods for the Examination of Water and Wastewater", 13th Edition.

The Region and Basin and State Well Numbering Systems are described in Appendix C, "Ground Water Measurements", on page 19. The locations of the ground water basins and subbasins are shown on Figure C-1, pages 21, 22, and 23.



INDEX TO GROUND WATER QUALITY DATA  
IN THE CENTRAL COASTAL AREA

<u>Number</u>	<u>Name</u>	<u>Page</u>
NORTH COASTAL REGION 1-00.00 (Figure C-1, Page 21)		
1-14.00	Potter Valley . . . . .	86
1-15.00	Ukiah Valley . . . . .	86
1-16.00	Sanel Valley . . . . .	86
1-17.00	Alexander Valley . . . . .	86
1-18.00	Santa Rosa Valley	
1-18.01	Santa Rosa Area . . . . .	86, 98
1-18.02	Healdsburg Area . . . . .	86
1-19.00	Anderson Valley . . . . .	87
1-20.00	Point Arena . . . . .	87
1-21.00	Fort Bragg Terrace . . . . .	87
1-80.00	Miscellaneous Area . . . . .	98
1-98.00	Lower Russian River Valley . . . . .	87, 98
SAN FRANCISCO BAY REGION 2-00.00 (Figure C-1, Page 22)		
2-01.00	Petaluma Valley . . . . .	88, 98
2-02.00	Napa-Sonoma Valley	
2-02.01	Napa Valley . . . . .	88
2-02.02	Sonoma Valley . . . . .	88, 98
2-03.00	Suisun-Fairfield Valley . . . . .	89
2-04.00	Pittsburg Plain . . . . .	89
2-05.00	Clayton Valley . . . . .	89
2-06.00	Ygnacio Valley . . . . .	89
2-09.00	Santa Clara Valley	
2-09.01	East Bay Area . . . . .	90
2-09.02	South Bay Area . . . . .	91, 98
2-10.00	Livermore Valley . . . . .	91
2-22.00	Half Moon Bay Terrace . . . . .	92
2-24.00	San Gregorio Valley . . . . .	92
2-26.00	Pescadero Valley . . . . .	92
CENTRAL COASTAL REGION 3-00.00 (Figure C-1, Page 23)		
3-01.00	Soquel Valley . . . . .	93
3-02.00	Pajaro Valley . . . . .	
3-03.00	Gilroy-Hollister Valley	
3-03.01	South Santa Clara County . . . . .	93
3-03.02	San Benito County . . . . .	94
3-04.00	Salinas Valley	
3-04.01	Pressure Area . . . . .	95
3-04.02	East Side Area . . . . .	96
3-04.03	Forebay Area . . . . .	96
3-04.05	Upper Valley Area . . . . .	96
3-04.08	Seaside Area . . . . .	96
3-07.00	Carmel Valley . . . . .	96
3-26.00	West Santa Cruz Terrace . . . . .	97

TABLE E-1

MINERAL ANALYSES OF GROUND WATER

Sampler and Lab Agency Codes

- 2400 - Santa Clara Valley Water District
- 5000 - U. S. Geological Survey
- 5050 - Department of Water Resources
- 5100 - Alameda County Flood Control and Water Conservation District
- 5114 - Santa Clara County
- 5115 - Monterey County Flood Control and Water Conservation District
- 5401 - Alameda County Water District

Abbreviations

- TIME - Pacific Standard Time on a 24-hour clock
- TEMP - Water temperature in degrees Fahrenheit (F) and Celsius (C) at the time of field sampling
- PH - Measure of acidity (<7) or alkalinity (>7) of water
- EC - Electrical conductance in micromhos at 25° C
- TDS - Gravimetric determination of total dissolved solids at 180° C
- SUM - Total dissolved solids by summation of analyzed constituents
- TH - Total hardness
- NCH - Noncarbonate hardness - any excess of total hardness over total alkalinity
- SAR - Sodium adsorption ratio

Mineral Constituents

- |      |   |             |      |   |           |
|------|---|-------------|------|---|-----------|
| B    | - | Boron       | K    | - | Potassium |
| CA   | - | Calcium     | MG   | - | Magnesium |
| CL   | - | Chloride    | NA   | - | Sodium    |
| CO3  | - | Carbonate   | NO3  | - | Nitrate   |
| F    | - | Fluoride    | SI02 | - | Silica    |
| HCO3 | - | Bicarbonate | S04  | - | Sulfate   |



TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER								
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT REACTANCE VALUE	8	F	TDS	TM	SAR				
				PERCENT REACTANCE VALUE	8	F	TDS	TM	SAR													
1-00.00 1-14.00				NORTH COASTAL REGION POTTER VALLEY																		
07/24/73	5050		17N/11W-29F01 M	59 F 7.1	340	27	21	14	.3	0	198	7.2	7.1	.9	.10	--	174	153				
1100	5050			15 C 8.2	340	1.35	1.73	.61	.01	.00	3.25	.15	.20	.01	--	175	0	0.5				
						36	47	16			90	4	6									
1-15.00				UKIAH VALLEY																		
07/24/73	5050		14N/12W-11N01 M	7.1	375	27	25	12	1.0	0	177	19	10	22.0	.20	--	204	172				
1400	5050			8.1	386	1.35	2.06	.52	.03	.00	2.90	.40	.28	.35	--	203	26	0.4				
						34	52	13	1		74	10	7	9								
07/24/73	5050		15N/12W-08P01 M	68 F 7.3	500	40	29	24	.9	0	276	13	21	.6	.00	--	262	218				
1645	5050			20 C 7.9	503	2.00	2.38	1.04	.02	.00	4.52	.27	.59	.01	--	264	0	0.7				
						37	44	19			84	5	11									
07/24/73	5050		15N/12W-35D01 M	7.3	420	37	9.8	31	.3	0	221	.3	15	4.1	.20	--	199	133				
1450	5050			8.2	389	1.85	.81	1.35	.01	.00	3.62	.01	.42	.07	--	206	0	1.2				
						46	20	34			88		10	2								
1-16.00				SANEL VALLEY																		
07/25/73	5050		12N/11W-02F01 M	66 F 7.7	375	37	21	12	1.2	0	218	16	6.2	2.9	.30	--	207	180				
1330	5050			19 C 8.2	386	1.85	1.73	.52	.03	.00	3.57	.33	.17	.05	--	204	1	0.4				
						45	42	13	1		87	8	4	1								
07/25/73	5050		13N/11W-18E01 M	61 F 7.0	370	--	--	18	--	0	201	--	12	--	--	--	158					
1245	5050			16 C 7.6	380			.78	--	.00	3.29		.34	--	--	--	0.6					
								20														
1-17.00				ALEXANDER VALLEY																		
07/25/73	5050		09N/08W-07Q01 M	7.7	575	--	--	128	--	0	313	--	35	--	--	--	12					
1730	5050			7.7	593			5.57	--	.00	5.13		.99	--	--	--	16.1					
								96														
07/26/73	5050		09N/09W-01P01 M	57 F 7.1	380	30	26	9.2	.6	0	192	28	6.2	9.8	.00	--	215	184				
1030	5050			14 C 8.1	388	1.50	2.14	.40	.02	.00	3.15	.58	.17	.16	--	204	25	0.3				
						37	53	10			78	14	4	4								
07/25/73	5050		10N/09W-26L02 M	67 F 6.9	510	30	44	11	.1	0	193	73	10	37.0	.10	--	322	258				
1615	5050			19 C 8.0	535	1.50	3.62	.48	.00	.00	3.16	1.52	.28	.60	--	300	98	0.3				
						27	65	9			57	27	5	11								
1-18.00 1-18.01				SANTA ROSA VALLEY SANTA ROSA AREA																		
07/27/73	5050		05N/09W-03F01 M	68 F 6.7	675	--	--	44	--	0	132	--	75	--	--	--	225					
1000	5050			20 C 7.1	656			1.91	--	.00	2.16		2.12	--	--	--	1.3					
								30														
07/27/73	5050		06N/07W-18R01 M	7.0	625	--	--	50	--	0	279	--	44	--	--	--	220					
0845	5050			8.1	628			2.18	--	.00	4.57		1.24	--	--	--	1.5					
								33														
07/26/73	5050		07N/06W-29P01 M	7.3	245	--	--	22	--	0	150	--	4.9	--	--	--	83					
1800	5050			7.8	238			.96	--	.00	2.46		.14	--	--	--	1.1					
								37														
07/26/73	5050		07N/07W-15C01 M	7.5	255	--	--	25	--	0	152	--	5.7	--	--	--	80					
1730	5050			7.7	255			1.09	--	.00	2.49		.16	--	--	--	1.2					
								41														
07/26/73	5050		07N/08W-30P01 M	64 F 7.1	1175	--	--	57	--	0	218	--	137	--	--	--	421					
1400	5050			18 C 7.6	1130			2.48	--	.00	3.57		3.86	--	--	--	1.2					
								23														
07/26/73	5050		07N/09W-09F01 M	6.5	160	--	--	14	--	0	69	--	13	--	--	--	39					
1300	5050			7.4	152			.61	--	.00	1.13		.37	--	--	--	1.0					
								44														
1-18.02				HEALDSBURG AREA																		
07/26/73	5050		09N/10W-01C01 M	7.1	210	--	--	16	--	0	119	--	6.3	--	--	--	71					
1115	5050			7.5	208			.70	--	.00	1.95		.18	--	--	--	0.8					
								33														





TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER						
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	SAR		
2-00.00 2-01.00		SAN FRANCISCO BAY REGION PETALUMA VALLEY																	
07/27/73	5050 1400		7.7 7.8	2000 1860	--	--	310 13.49 72	--	0 .00	575 9.42	--	316 8.91	--	--	--	--	257	8.4	
07/27/73	5050 1430	67 19	F C	6.3 7.1	178 176	--	--	14 .61 41	--	0 .00	27 .44	--	16 .45	--	--	--	44	0.9	
07/27/73	5050 1230	62 17	F C	7.7 8.1	1010 964	--	--	77 3.35 30	--	0 .00	546 8.95	--	42 1.18	--	--	--	392	1.7	
05/17/73	5117 5050			8.1	1190	2.30 19	2.88 23	164 7.13 58	2.0 .05	0 .00	494 8.10 66	3.6 .07	143 4.03 33	.1 .00	.30	.1 30.0	663 667	261 0	4.4
07/27/73	5050 1330			7.1	18800	--	--	--	--	--	--	--	6280 177.10	--	--	--	--	--	--
07/27/73	5050 1200	8.3 8.4		825 836	22 13	9.2 .76	155 6.74 78	.8 .02	5.0 .17	401 6.57 2	38 .79	54 1.52 17	.6 .01	.80	--	--	473 483	93 0	7.0
2-02.00		NAPA-SONOMA VALLEY																	
2-02.01		NAPA VALLEY																	
07/31/73	5050 1000			7.9 8.0	1250 1260	--	--	103 4.48 34	--	0 .00	364 5.97	--	161 4.54	--	--	--	427	2.2	
07/31/73	5050 1130	65 18	F C	7.5 8.0	1825 1620	--	--	283 12.31 71	--	0 .00	691 11.33	--	184 5.19	--	--	--	254	7.7	
08/01/73	5050 1330	71 22	F C	7.3 7.9	1050 1040	--	--	113 4.92 50	--	0 .00	258 4.23	--	160 4.51	--	--	--	244	3.1	
07/31/73	5050 1245			7.2 8.0	1750 1620	--	--	148 6.44 41	--	0 .00	327 5.36	--	325 9.17	--	--	--	468	3.0	
07/31/73	5050 1345	7.5 8.2		710 716	17 .85 13	8.9 .73 11	117 5.09 75	4.6 .12 2	0 .00	237 3.88 57	.5 .01	101 2.85 42	.7 .01	2.40	--	--	436 369	79 0	5.7
08/01/73	5050 1415	8.0		3500	--	--	--	--	--	--	--	648 18.27	--	--	--	--	--	--	--
08/01/73	5050 1440	7.9 8.0		590 587	--	--	96 4.18 73	--	0 .00	306 5.02	--	32 .90	--	--	--	--	78	4.7	
08/01/73	5050 1545	68 20	F C	7.1 8.0	250 249	9.3 .46 19	4.9 .40 16	34 1.48 60	4.8 .12 5	0 .00	134 2.20 86	8.2 .17 7	6.6 .19 7	.4 .01	.10	--	202 134	43 0	2.2
08/02/73	5050 0900	7.5 8.1		320 313	--	--	27 1.17 35	--	0 .00	180 2.95	--	6.7 .19	--	--	--	--	109	1.1	
08/02/73	5050 1030	76 24	F C	7.3 8.0	275 279	--	--	45 1.96 73	--	0 .00	137 2.25	--	6.9 .19	--	--	--	37	3.2	
08/02/73	5050 1130	82 28	F C	7.7 7.8	1000 973	--	--	180 7.83 89	--	0 .00	185 3.03	--	201 5.67	--	--	--	46	11.6	
2-02.02		SONOMA VALLEY																	
07/30/73	5050 1315	77 25	F C	7.3 8.1	1025 1020	13 .65 6	9.1 .75 7	196 8.53 85	3.2 .08 1	0 .00	310 5.08 51	51 1.06 11	132 3.72 38	.4 .01	.10	--	635 557	70 0	10.2
05/16/73	5117 5050			7.8	2750	64 12	72 23	385 16.75 64	14 .36 1	0 .00	610 10.00 38	.0 .00	561 15.82 60	32.0 .52 2	1.90	.1 56.0	1520 1486	450 0	7.8

TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN										MILLIGRAMS PER LITER					MILLIGRAMS PER LITER				
				MILLIEQUIVALENTS PER LITER										PERCENT REFRACTANCE VALUE					PERCENT REFRACTANCE VALUE				
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS	TH	SAF	SI02	SUM	NCM	SAR		
2-00.00 2-02.00		SAN FRANCISCO BAY REGION NAPA-SONOMA VALLEY																					
2-02.02 05N/05W-28R01		SONOMA VALLEY																					
07/30/73	5050	70	F	8.2	1125	--	--	223	--	11	436	--	91	--	--	--	70						
1415	5050	21	C	8.5	1070			9.70		.37	7.15		2.57						11.6				
								87															
07/30/73	5050	64	F	7.0	460	19	18	51	1.6	0	227	9.5	30	3.3	.70	--	290	122					
1515	5050	18	C	8.1	464	.95	1.48	2.22	.04	.00	3.72	.20	.85	.05	--	245	0	2.0					
						20	32	47	1		77	4	18	1									
07/30/73	5050	84	F	8.3	545	--	--	128	--	0	316	--	21	--	--	--	12						
1630	5050	29	C	8.3	562			5.57		.00	5.18		.59						16.1				
								96															
2-03.00		SUISUN-FAIRFIELD VALLEY																					
07/18/73	5050			8.7	1175	--	--	254	--	0	546	--	73	--	--	--	46						
1530	5050			8.2	1140			11.05		.00	8.95		2.06						16.3				
								92															
07/18/73	5050			7.3	1025	--	--	128	--	0	242	--	157	--	--	--	215						
1630	5050			8.0	1020			5.57		.00	3.97		4.43						3.8				
								56															
07/19/73	5050			7.7		--	--	650	--	0	599	--	859	--	--	--	425						
1015	5050			8.1	3660			28.28		.00	9.82		24.22						13.7				
								77															
07/19/73	5050			7.9		--	--	--	--	--	--	--	977	--	--	--							
1200	5050				3560								27.55										
07/19/73	5050			7.3	2000	--	--	206	--	0	233	--	485	--	--	--	462						
1315	5050			7.9	1910			8.96		.00	3.82		13.68						4.2				
								49															
07/19/73	5050	68	F	7.5	825	--	--	59	--	0	294	--	102	--	--	--	283						
1430	5050	20	C	7.8	811			2.57		.00	4.82		2.88						1.5				
								31															
07/18/73	5050	65	F	7.3	1400	94	37	119	.2	0	333	26	221	39.0	1.30	--	789	386					
1315	5050	18	C	7.8	1320	4.69	3.04	5.18	.01	.00	5.46	.54	6.23	.63	--	701	114	2.6					
						36	24	40			42	4	48	5									
07/18/73	5050	64	F	7.5	2000	84	47	188	.6	0	328	54	336	21.0	3.80	--	966	404					
1400	5050	18	C	7.5	1700	4.19	3.87	8.18	.02	.00	5.38	1.12	9.48	.34	--	896	134	4.1					
						26	24	50			33	7	58	2									
07/19/73	5050	66	F	7.3	1025	--	--	67	--	0	454	--	57	--	--	--	427						
1530	5050	19	C	8.1	985			2.91		.00	7.44		1.61						1.4				
								25															
07/19/73	5050			7.5	1400	35	40	192	.0	0	528	164	39	16.0	1.90	--	732	253					
1600	5050			8.2	1230	1.75	3.29	8.35	.00	.00	8.65	3.41	1.10	.26	--	748	0	5.3					
						13	25	62			64	25	8	2									
2-04.00		PITTSBURG PLAIN																					
08/09/73	5050	69	F	7.7	4000	--	--	385	--	0	383	--	479	--	--	--	746						
1145	5050	21	C	8.1	2950			16.75		.00	6.28		13.51						6.1				
								53															
08/02/73	5050	67	F	7.9	3300	--	--	418	--	0	395	--	602	--	--	--	522						
1430	5050	19	C	7.9	2840			18.18		.00	6.47		16.98						8.0				
								64															
2-05.00		CLAYTON VALLEY																					
08/02/73	5050			7.5	1020	83	54	50	.5	0	382	130	54	33.0	.50	--	605	431					
1630	5050			8.3	997	4.14	4.44	2.18	.01	.00	6.26	2.71	1.52	.53	--	593	116	1.1					
						38	41	20			57	25	14	5									
08/09/73	5050	67	F	7.9	1050	--	--	121	--	0	350	--	138	--	--	--	232						
1030	5050	19	C	8.1	985			5.26		.00	5.74		3.89						3.5				
								53															
08/03/73	5050	65	F	7.2	1300	--	--	121	--	0	357	--	135	--	--	--	351						
0845	5050	18	C	8.1	1200			5.26		.00	5.85		3.81						2.8				
								43															
2-06.00		YGNACIO VALLEY																					
08/03/73	5050			7.4	2500	--	--	272	--	0	411	--	202	--	--	--	610						
0930	5050			8.2	2240			11.83		.00	6.74		5.70						4.8				
								49															



TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH EC	MILLIGRAMS PER LITER										MILLIGRAMS PER LITER						
				MINERAL CONSTITUENTS IN										MILLIEQUIVALENTS PER LITER						
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	PERCENT REACTANCE VALUE	B	F	TDS	TH	SAR		
		2-00.00	SAN FRANCISCO BAY REGION																	
		2-06.00	YGNACIO VALLEY																	
		01N/02W-11N01	M																	
08/03/73	5050	68	F	7.5	1450	73	39	142	2.6	0	472	43	165	.6	1.40	--	690	344		
1015	5050	20	C	7.9	1290	3.64	3.21	6.18	.07	.00	7.74	.90	4.65	.01	--	--	699	0	3.3	
						28	25	47	1		58	7	35							
		02N/02W-35D01	M																	
08/03/73	5050	65	F	7.4	3500	--	--	272	--	0	482	--	395	--	--	--		863		
1100	5050	18	C	7.9	2720			11.83		.00	7.90		11.14		--	--			4.0	
								41												
		2-09.00	SANTA CLARA VALLEY																	
		2-09.01	EAST BAY AREA																	
		01S/04W-04A01	M																	
08/14/73	5100	66	F			--	--	115	--	0	384	--	221	--	--	--		512		
1030	5050	19	C	7.8	1480			5.00		.00	6.29		6.23		--	--			2.2	
								33												
		01S/04W-34F02	M																	
08/14/73	5100	65	F			28	35	133	1.8	0	261	30	176	12.0	.20	--	573	214		
1100	5050	18	C	8.4	1040	1.40	2.88	5.79	.05	.00	4.28	.62	4.96	.19	--	--	544	0	4.0	
						14	28	57			43	6	49	2						
		02S/03W-28G01	M																	
08/14/73	5100			7.5	67	--	--	2.7	--	0	30	--	2.4	--	--	--		27		
1220	5050							.12		.00	.49		.07		--	--			0.2	
								18												
		02S/04W-25A01	M																	
08/14/73	5100	64	F			40	17	117	1.8	0	299	44	90	.1	.40	--	490	168		
1240	5050	18	C	8.3	834	2.00	1.40	5.09	.05	.00	4.90	.92	2.54	.00	--	--	457	0	3.9	
						23	16	60	1		59	11	30							
		03S/02W-07J01	M																	
08/14/73	5100	64	F			--	--	71	--	0	387	--	67	--	--	--		367		
1400	5050	18	C	7.6	965			3.09		.00	6.34		1.89		--	--			1.6	
								30												
		03S/02W-32D02	M																	
08/14/73	5100	74	F			--	--	142	--	0	2	--	94	--	--	--		278		
1450	5050	23	C	4.4	2080			6.18		.00	.03		2.65		--	--			3.7	
								53												
		03S/03W-24J01	M																	
08/14/73	5100	65	F			--	--	--	--	--	--	--	505	--	--	--				
1500	5050	18	C		2620								14.24		--	--				
		04S/01W-07R05	M																	
09/18/73	5401	66	F	7.3	1700	--	--	104	--	0	342	--	326	--	--	--		636		
0945	5050	19	C	8.1	1730			4.52		.00	5.61		9.19		--	--			1.8	
								26												
		04S/01W-21P06	M																	
09/18/73	5401	64	F	7.8	700	--	--	45	--	0	211	--	49	--	--	--		188		
0850	5050	18	C	7.9	573			1.96		.00	3.46		1.38		--	--			1.4	
								34												
		04S/01W-27K01	M																	
09/18/73	5401	64	F	8.2	2100	--	--	449	--	51	810	--	174	--	--	--		376		
1000	5050	18	C	8.6	2440			19.53		1.70	13.28		4.91		--	--			10.1	
								72												
		04S/01W-28C01	M																	
09/18/73	5401	64	F	7.8	800	34	30	55	1.5	0	167	62	82	10.0	.50	--	383	209		
1010	5050	18	C	8.0	671	1.70	2.47	2.39	.04	.00	2.74	1.29	2.31	.16	--	--	357	72	1.7	
						26	37	36	1		42	20	36	2						
		04S/01W-30E03	M																	
09/18/73	5401	64	F	7.6	1900	--	--	110	--	0	79	--	684	--	--	--		898		
1545	5050	18	C	7.5	2450			4.79		.00	1.29		19.29		--	--			1.6	
								21												
		04S/01W-33A02	M																	
09/19/73	5401	64	F	7.7	1400	--	--	71	--	0	254	--	143	--	--	--		364		
1000	5050	18	C	7.7	1050			3.09		.00	4.16		4.03		--	--			1.6	
								30												
		04S/01W-33C01	M																	
09/18/73	5401	65	F	7.3	1800	--	--	172	--	0	423	--	177	--	--	--		447		
0830	5050	18	C	7.8	1570			7.48		.00	6.93		4.99		--	--			3.5	
								46												
		04S/01W-34Q04	M																	
09/18/73	5401	75	F	7.4	1600	94	55	116	1.9	0	392	59	194	81.0	.20	--	814	462		
1445	5050	24	C	7.9	1400	4.69	4.52	5.05	.05	.00	6.42	1.23	5.47	1.31	--	--	794	140	2.4	
						33	32	35			44	9	38	9						
		04S/01W-34R02	M																	
09/18/73	5401	69	F	8.1	750	--	--	75	--	0	254	--	42	--	--	--		124		
1500	5050	21	C	8.2	555			3.26		.00	4.16		1.18		--	--			2.9	
								57												
		04S/02W-10C01	M																	
09/18/73	5401	68	F	7.9	800	--	--	55	--	0	199	--	47	--	--	--		166		
1140	5050	20	C	7.9	572			2.39		.00	3.26		1.33		--	--			1.9	
								42												
		04S/02W-11O10	M																	
09/18/73	5401	67	F	7.8	950	--	--	45	--	0	183	--	113	--	--	--		294		
1110	5050	19	C	7.8	802			1.96		.00	3.00		3.19		--	--			1.1	
								25												

TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER				
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCM	SAR	
2-00.00 2-09.00		SAN FRANCISCO BAY REGION SANTA CLARA VALLEY																	
2-09.01 04S/02W-23F02		EAST BAY AREA																	
09/19/73	5401	66	F	7.8	1500	135	61	57	3.0	0	131	95	347	13.0	.30	--	1210	589	
0845	5050	19	C	7.5	1520	6.74	5.02	2.48	.08	.00	2.15	1.98	9.79	.21	--	776	481	1.0	
						47	35	17	1		15	14	69	1					
09/18/73	5401	68	F	8.1	700	--	--	109	--	0	291	--	40	--	--	--		105	
1450	5050	20	C	8.3	636			4.74		.00	4.77		1.13		--	--			4.6
								69											
09/18/73	5401	72	F	8.0	800	--	--	119	--	0	278	--	48	--	--	--		79	
1430	5050	22	C	8.3	669			5.18		.00	4.56		1.35		--	--			5.8
								77											
09/18/73	5401	74	F	8.4	700	--	--	128	--	11	343	--	21	--	--	--		90	
1420	5050	23	C	8.5	666			5.57		.37	5.62		.59		--	--			5.9
								76											
09/18/73	5401	70	F	8.2	700	--	--	110	--	0	295	--	21	--	--	--		66	
1400	5050	21	C	8.3	573			4.79		.00	4.84		.59		--	--			5.9
								78											
09/18/73	5401	75	F	8.3	500	--	--	95	--	0	224	--	15	--	--	--		23	
1430	5050	24	C	8.3	438			4.13		.00	3.67		.42		--	--			8.6
								90											
09/19/73	5401	66	F	8.1	500	--	--	68	--	0	231	--	14	--	--	--		93	
1400	5050	19	C	8.2	440			2.96		.00	3.79		.39		--	--			3.1
								61											
2-09.02 05S/01E-31R01		SOUTH BAY AREA																	
08/10/73	5050			7.3	1800	106	59	125	.4	0	459	76	149	123	.20	--	958	506	
1100	5050			7.5	1500	5.29	4.85	5.44	.01	.00	7.52	1.58	4.20	1.98	--	--	864	131	2.4
						34	31	35			49	10	27	13					
08/14/73	5050	68	F	7.5	750	80	30	31	1.6	0	303	73	43	9.1	.10	--	408	324	
1000	5050	20	C	7.9	741	3.99	2.47	1.35	.04	.00	4.97	1.52	1.21	.15	--	--	417	75	0.8
						51	31	17	1		63	19	15	2					
08/17/73	5050	68	F	7.2	500	--	--	28	--	0	182	--	30	--	--	--		193	
1015	5050	20	C	8.2	511			1.22		.00	2.98		.85		--	--			0.9
								24											
08/16/73	5050	64	F	7.5	700	58	40	28	1.1	0	326	69	18	14.0	.10	--	393	311	
1330	5050	18	C	7.9	688	2.89	3.29	1.22	.03	.00	5.34	1.44	.51	.23	--	--	388	42	0.7
						39	44	16			71	19	7	3					
08/16/73	5050			7.7	535	--	--	22	--	0	244	--	17	--	--	--		236	
1045	5050			8.1	529			.96		.00	4.00		.48		--	--			0.6
								17											
08/16/73	5050	63	F	7.3	740	--	--	31	--	0	310	--	23	--	--	--		312	
1200	5050	17	C	8.0	715			1.35		.00	5.08		.65		--	--			0.8
								18											
06/28/73	5050	64	F	7.1	1800	82	54	100	1.1	0	314	124	156	41.0	.40	--	742	428	
1600	5050	18	C	7.6	1280	4.09	4.44	4.35	.03	.00	5.15	2.58	4.40	.66	--	--	713	169	2.1
						32	34	34			40	20	34	5					
2-10.00		LIVERMORE VALLEY																	
08/20/73	5100	74	F			--	--	626	--	0	430	--	1120	--	--	--		746	
1245	5050	23	C	8.2	4300			27.23		.00	7.05		31.58		--	--			10.0
								65											
08/20/73	5100	65	F			40	20	110	1.6	9.0	315	34	74	.2	.50	--	469	182	
1300	5050	18	C	8.5	795	2.00	1.64	4.79	.04	.30	5.16	.71	2.09	.00	--	--	444	0	3.5
						24	19	57		4	62	9	25						
08/20/73	5100	62	F			--	--	74	--	0	416	--	154	--	--	--		508	
0950	5050	17	C	8.2	1270			3.22		.00	6.82		4.34		--	--			1.4
								24											
08/20/73	5100	72	F			--	--	51	--	0	335	--	79	--	--	--		338	
1010	5050	22	C	8.0	851			2.22		.00	5.49		2.23		--	--			1.2
								25											
08/20/73	5100	64	F			50	28	67	1.0	0	298	32	69	.2	.90	--	406	239	
1030	5050	18	C	8.0	729	2.50	2.30	2.91	.03	.00	4.88	.67	1.95	.00	--	--	395	0	1.9
						32	30	38			65	9	26						



TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY		MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER				
			PH	EC	CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	SAR	
		2-00.00	SAN FRANCISCO BAY REGION																
		2-10.00	LIVERMORE VALLEY																
			03S/01E-19A05 M																
08/20/73	5100	60	F		56	30	32	1.5	0	253	55	40	5.6	.30	--	352	262		
1345	5050	16	C	8.0	631	2.79	2.47	1.39	.04	.00	4.15	1.15	1.13	.09	--	345	56	0.9	
			03S/02E-29D01 M																
08/20/73	5100	66	F		--	--	48	--	0	280	--	60	--	--	--		284		
1045	5050	19	C	8.1	741			2.09	.00	4.59		1.69		--	--			1.2	
			03S/03E-19C01 M																
08/20/73	5100	80	F		--	--	121	--	0	296	--	194	--	--	--		308		
1130	5050	27	C	7.7	1170			5.26	.00	4.85		5.47		--	--			3.0	
		2-22.00	HALF MOON BAY TERRACE																
			05S/05W-20E01 M																
05/23/73	5050	61	F	7.1	490	38	17	40	.5	0	116	42	56	32.0	.00	--	347	164	
0930	5050	16	C	8.0	577	1.90	1.40	1.74	.01	.00	1.90	.87	1.58	.52	--	283	70	1.4	
			05S/05W-32D01 M																
05/23/73	5050	60	F	7.1	900	59	23	136	1.2	0	198	90	190	26.0	.00	--	663	241	
1030	5050	16	C	8.2	1160	2.94	1.89	5.92	.03	.00	3.25	1.87	5.36	.42	--	623	79	3.8	
		2-24.00	SAN GREGORIO VALLEY																
			07S/05W-15B01 M																
06/07/73	5050	76	F	6.8	1600	115	66	154	1.4	0	214	794	270	28.0	.20	--	1220	560	
1315	5050	24	C	8.2	1770	5.74	5.43	6.70	.04	.00	3.51	6.12	7.61	.45	--	1034	383	2.8	
			07S/05W-15E01 M																
05/30/73	5050			7.2	1200	53	54	206	1.4	16	349	148	242	12.0	.60	--	906	356	
1445	5050			8.5	1570	2.64	4.44	8.96	.04	.53	5.72	3.08	6.82	.19	--	905	42	4.8	
		2-26.00	PESCADERO VALLEY																
			08S/05W-09J01 M																
05/30/73	5050	63	F	7.0	950	17	38	117	2.2	4.0	267	17	156	1.7	.20	--	490	198	
1530	5050	17	C	8.3	932	.85	3.13	5.09	.06	.13	4.38	.35	4.40	.03	--	484	0	3.6	
			08S/05W-10M01 M																
05/31/73	5050	58	F	7.1	975	81	41	68	1.2	0	196	142	88	122	.00	--	730	371	
1100	5050	14	C	8.1	1080	4.04	3.37	2.96	.03	.00	3.21	2.96	2.48	1.97	--	640	210	1.5	

TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN				MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER					MILLIGRAMS PER LITER						
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	SAR		
3-00.00		CENTRAL COASTAL REGION																		
3-01.00		SOQUEL VALLEY																		
06/19/73	5050	67	F	7.5	355	26	21	18	2.4	1.0	169	20	18	.7	.00	--	229	150		
1400	5050	19	C	8.3	364	1.30	1.73	.78	.06	.03	2.77	.42	.51	.01	--	--	190	12	0.6	
						34	45	20	2	1	74	11	14							
06/14/73	5050			7.5	1150	88	43	62	8.0	0	202	76	199	10.0	.00	--	763	396		
1300	5050			8.2	1120	4.39	3.54	2.70	.20	.00	3.31	1.58	5.61	.16	--	--	585	231	1.4	
						41	33	25	2		31	15	53	2						
06/14/73	5050	71	F	7.5	750	27	25	68	3.7	1.0	238	102	28	2.1	.30	--	407	171		
1345	5050	22	C	8.3	669	1.35	2.06	2.96	.09	.03	3.90	2.12	.79	.03	--	--	374	0	2.3	
						21	32	46	1		57	31	11							
3-03.00		GILROY-HOLLISTER VALLEY																		
3-03.01		SOUTH SANTA CLARA COUNTY																		
08/22/73	5114	68	F	7.7	462	40	24	25	--	0	190	--	25	45.0	--	--		201		
	5050	20	C	8.1	495	2.00	1.97	1.09		.00	3.11		.71	.73	--	--		43	0.8	
						40	39	22			68		16	16						
08/07/73	5114	67	F	7.6	577	.7	.6	144	.0	10	271	26	22	26.0	.00	--	407	4		
	5050	19	C	8.6	633	.03	.05	6.26	.00	.33	4.44	.54	.62	.42	--	--	363	0	30.5	
							1	99		5	70	9	10	7						
09/18/73	5050				490	--	--	19	.1	0	166	--	--	--	--	--				
0935	5050			7.9	534			.83	.00	.00	2.72				--	--				
09/18/73	5050				430	--	--	16	.0	0	190	24	--	--	--	--				
0815	5050			7.8	472			.70	.00	.00	3.11	.50			--	--				
09/18/73	5050				440	--	--	16	.0	0	186	22	--	--	--	--				
0830	5050			7.5	465			.70	.00	.00	3.05	.46			--	--				
09/18/73	5050				700	--	--	37	.3	0	405	--	--	--	--	--				
0905	5050			7.7	758			1.61	.01	.00	6.64				--	--				
09/18/73	5050				500	--	--	15	.0	0	249	--	--	--	--	--				
0955	5050			7.9	528			.65	.00	.00	4.08				--	--				
08/22/73	5114	66	F	7.7	397	40	25	12	--	0	210	--	12	16.0	--	--		203		
	5050	19	C	8.3	425	2.00	2.06	.52		.00	3.44		.34	.26	--	--		31	0.4	
						44	45	11			85		8	6						
09/18/73	5050				490	--	--	13	.0	0	237	--	--	--	--	--				
1025	5050			7.9	518			.57	.00	.00	3.88				--	--				
08/22/73	5114	63	F	7.4	408	39	27	13	.6	2.0	216	24	14	10.0	.10	--	256	209		
	5050	17	C	8.4	442	1.95	2.22	.57	.02	.07	3.54	.50	.39	.16	--	--	236	28	0.4	
						41	47	12		2	76	11	8	3						
08/21/73	5114	64	F	7.4	508	51	34	14	--	0	254	--	28	19.0	--	--		266		
	5050	18	C	8.1	554	2.54	2.80	.61		.00	4.16		.79	.31	--	--		59	0.4	
						43	47	10			79		15	6						
08/07/73	5114	64	F	7.5	581	29	56	16	--	8.0	251	--	40	33.0	--	--		302		
	5050	18	C	8.5	617	1.45	4.61	.70		.27	4.11		1.13	.53	--	--		84	0.4	
						21	68	10												
08/07/73	5114	70	F	7.6	519	39	33	21	.3	5.0	183	26	38	46.0	.00	--	335	235		
	5050	21	C	8.4	560	1.95	2.71	.91	.01	.17	3.00	.54	1.07	.74	--	--	298	75	0.6	
						35	49	16		3	54	10	19	13						
08/07/73	5114	68	F	7.3	453	39	28	19	--	0	180	--	30	36.0	--	--		215		
	5050	20	C	8.3	490	1.95	2.30	.83		.00	2.95		.85	.58	--	--		65	0.6	
						38	45	16			67		19	13						
08/21/73	5114	71	F	7.6	824	49	46	73	--	6.0	345	--	96	12.0	--	--		311		
	5050	22	C	8.4	875	2.45	3.78	3.18		.20	5.65		2.71	.19	--	--		19	1.8	
						26	40	34												
08/21/73	5114	65	F	7.5	486	44	30	19	--	2.0	208	--	25	35.0	--	--		233		
	5050	18	C	8.4	521	2.20	2.47	.83		.07	3.41		.71	.56	--	--		60	0.5	
						40	45	15												
08/21/73	5114	70	F	7.8	428	42	22	22	--	5.0	190	--	20	28.0	--	--		194		
	5050	21	C	8.5	462	2.10	1.81	.96		.17	3.11		.56	.45	--	--		32	0.7	
						43	37	20												



TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER				
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	SAR	
		3-00.00	CENTRAL COASTAL REGION															
		3-03.00	GILROY-HOLLISTER VALLEY															
		3-03.01	SOUTH SANTA CLARA COUNTY															
08/21/73	5114 5050	M	69 F 7.8 21 C 8.3	491 524	28 1.40 25	34 2.80 50	32 1.39 25	-- .00	0 3.88 78	237 3.88 78	-- .73 15	23.0 .37 7	-- --	-- --	210 16	1.0		
08/25/73	5114 5050	M	66.5F 19.1C 8.3	525	39 1.95 36	30 2.47 46	22 .96 18	.9 .02	1.0 .03 1	192 3.15 60	35 .73 14	26 .73 14	40.0 .65 12	.00 --	315 288	219 62	0.6	
08/21/73	5114 5050	M	67 F 7.3 19 C 8.6	670 701	50 2.50 34	37 3.04 41	44 1.91 26	-- .33	10 4.36	266 4.36	-- 1.30	43.0 .69	-- --	-- --	277 43	1.2		
08/21/73	5114 5050	M	65 F 7.3 18 C 8.3	1005 988	62 3.09 30	59 4.85 48	50 2.18 21	1.0 .03	0 .00	359 5.88 57	86 1.79 17	52 1.47 14	75.0 1.21 12	.10 --	560 562	396 103	1.1	
08/22/73	5114 5050	M	64 F 7.2 18 C 8.1	753 801	70 3.49 41	50 4.11 48	23 1.00 12	-- .00	0 5.02 70	306 5.02 70	-- .79	82.0 1.32 11	-- --	-- --	383 129	0.5		
08/20/73	5114 5050	M	68 F 7.4 20 C 8.3	698 746	71 3.54 44	43 3.54 44	23 1.00 12	-- .00	0 4.34 57	265 4.34 57	-- 2.03	76.0 1.23 27	-- --	-- --	354 137	0.5		
08/20/73	5114 5050	M	67 F 7.6 19 C 8.1	742 711	53 2.64 36	43 3.54 48	27 1.17 16	1.1 .03	0 .00	305 5.00 68	46 .96 13	34 .96 13	29.0 .47 6	.00 --	426 383	310 59	0.7	
08/20/73	5114 5050	M	67 F 7.6 19 C 8.3	724 767	66 3.29 41	40 3.29 41	32 1.39 17	1.0 .03	0 .00	310 5.08 63	72 1.50 18	34 .96 12	36.0 .58 7	.10 --	476 434	329 75	0.8	
08/20/73	5114 5050	M	68 F 7.5 20 C 8.2	813 815	63 3.14 38	45 3.70 45	31 1.35 16	1.3 .03	0 .00	311 5.10 61	76 1.58 19	38 1.07 13	39.0 .63 8	.10 --	506 446	341 87	0.7	
08/20/73	5114 5050	M	66 F 7.6 19 C 8.1	744 795	79 3.94 45	44 3.62 42	26 1.13 13	-- .00	0 5.39 75	329 5.39 75	-- .87	57.0 .92 12	-- --	-- --	379 109	0.6		
		3-03.02	SAN BENITO COUNTY															
05/10/73	5050 0735	M	7.0 7.1	150 2020	98 7.49 36	114 8.06 39	2.2 4.96 24	0 .06	0 .00	516 8.46 41	78 1.62 8	341 9.62 47	58.0 .94 5	1.50 --	1180 1096	776 355	1.8	
05/10/73	5050 0750	M	7.0 7.5	83 1260	51 4.14 32	100 4.19 33	2.3 4.35 34	0 .06	0 .00	502 8.23 64	48 1.00 8	129 3.64 28	3.1 .05	2.60 --	731 666	416 5	2.1	
05/10/73	5050 0820	M	7.8 7.8	45 1080	46 2.25 20	120 3.78 33	2.1 5.22 46	0 .05	0 .00	359 5.88 52	163 3.39 30	73 2.06 18	2.0 .03	1.00 --	643 629	303 8	3.0	
05/10/73	5050 0840	M	7.4 7.6	74 1860	99 3.69 18	195 8.14 40	3.0 8.48 42	0 .08	0 .00	452 7.41 36	423 8.81 43	157 4.43 21	.9 .01	1.20 --	1200 1175	591 221	3.5	
05/10/73	5050 0900	M	7.2 7.4	101 2430	141 5.04 18	245 11.60 42	4.1 10.66 39	0 .10	0 .00	544 8.92 32	509 10.60 38	251 7.08 26	65.0 1.05 4	1.60 --	1620 1585	832 386	3.7	
05/10/73	5050 1000	M	7.6 7.7	51 711	29 2.54 36	46 2.38 34	1.9 2.00 29	0 .05	0 .00	256 4.20 60	29 .60 9	78 2.20 31	.0 .00	1.70 --	418 362	249 36	1.3	
05/16/73	5050 0850	M	78.0F 25.5C 7.8	975 1060	39 1.95 18	34 2.80 26	135 5.87 55	2.6 .07 1	0 .00	272 4.46 41	185 3.85 36	87 2.45 23	1.1 .02	1.10 --	654 619	236 15	3.8	
05/10/73	5050 1025	M	7.4 7.6	60 1350	70 2.99 21	130 5.76 40	2.6 5.66 39	0 .07	0 .00	361 5.92 40	260 5.41 37	113 3.19 22	11.0 .18 1	.90 --	849 825	437 142	2.7	
05/16/73	5050 0950	M	70.0F 21.1C 7.4	1400 1500	64 3.19 20	83 6.83 42	142 6.18 38	2.6 .07	0 .00	436 7.15 43	290 6.04 37	110 3.10 19	9.7 .16 1	1.00 --	952 917	502 144	2.8	
05/10/73	5050 1220	M	7.6 7.6	52 1520	70 2.59 15	190 5.76 34	4.4 8.27 49	0 .11 1	0 .00	502 8.23 50	231 4.81 29	120 3.38 20	5.7 .09 1	1.00 --	954 921	416 6	4.0	

TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH	EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER						
					CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	SAR			
		3-00.00	CENTRAL COASTAL REGION																		
		3-03.00	GILROY-MOLLISTER VALLEY																		
		3-03.02	SAN BENITO COUNTY																		
		12S/05E-35802	M																		
05/16/73	5050	72.0F	7.4	960	46	47	108	2.6	0	316	183	74	4.4	.90	--	665	310				
1035	5050	22.2C	8.0	1070	2.30	3.87	4.70	.07	.00	5.18	3.81	2.09	.07	--	621	50	2.7				
					21	35	43	1		46	34	19	1								
		13S/05E-04E01	M																		
05/10/73	5050	7.0		956	40	47	69	.7	0	178	16	167	59.0	.00	--	593	294				
1245	5050	7.2			2.00	3.87	3.00	.02	.00	2.92	.33	4.71	.95	--	486	148	1.8				
					22	44	34			33	4	53	11								
		13S/05E-13F02	M																		
05/16/73	5050	69.0F	7.4	1450	58	81	159	3.1	0	384	307	130	27.0	1.10	--	1000	482				
1120	5050	20.5C	7.8	1560	2.89	6.66	6.92	.08	.00	6.29	6.39	3.67	.44	--	955	163	3.2				
					17	40	42			37	38	22	3								
		3-04.00	SALINAS VALLEY																		
		3-04.01	PRESSURE AREA																		
		13S/02E-28M01	M																		
07/13/73	5115			800	52	39	74	4.1	0	247	44	137	21.0	.00	--	531	289				
	5050	7.5		982	2.59	3.21	3.22	.10	.00	4.05	.92	3.86	.34	--	493	88	1.9				
					28	35	35	1		44	10	42	4								
		13S/02E-33R01	M																		
08/13/73	5115	64.0F		950	101	39	71	3.2	0	258	90	174	3.7	.00	--	635	411				
	5050	17.8C	7.8	1170	5.04	3.21	3.09	.08	.00	4.23	1.87	4.91	.06	--	609	201	1.5				
					44	28	27	1		38	17	44	1								
		13S/02E-35L01	M																		
08/13/73	5115			460	34	18	48	2.6	0	234	5.8	43	2.0	.00	--	289	160				
	5050	7.9		548	1.70	1.48	2.09	.07	.00	3.84	.12	1.21	.03	--	268	0	1.7				
					32	28	39	1		74	2	23	1								
		13S/02E-36J01	M																		
08/13/73	5115			430	46	13	39	1.9	0	241	5.9	30	.0	.00	--	288	168				
	5050	7.6		487	2.30	1.07	1.70	.05	.00	3.95	.12	.85	.00	--	254	0	1.3				
					45	21	33	1		80	2	17									
		14S/02E-02M01	M																		
08/06/73	5115	64.0F		490	55	40	74	2.4	0	454	8.2	58	.9	.00	--	467	301				
	5050	17.8C	7.9	748	2.74	3.29	3.22	.06	.00	7.44	.17	1.64	.01	--	462	0	1.9				
					29	35	35	1		80	2	18									
		14S/02E-23A01	M																		
08/13/73	5115	68.0F		790	82	30	74	3.1	0	293	66	122	1.2	.10	--	560	326				
	5050	20.0C	7.7	982	4.09	2.47	3.22	.08	.00	4.80	1.37	3.44	.02	--	522	88	1.8				
					41	25	33	1		50	14	36									
		14S/02E-23J01	M																		
08/20/73	5115	68.0F		1010	83	47	91	4.6	0	218	181	158	1.0	.20	--	730	401				
	5050	20.0C	7.7	1220	4.14	3.87	3.96	.12	.00	3.57	3.77	4.46	.02	--	673	222	2.0				
					34	32	33	1		30	32	38									
		14S/02E-35G01	M																		
08/20/73	5115	70 F		400	60	14	32	3.5	0	165	85	35	1.2	.00	--	355	209				
	5050	21 C	7.9	586	2.99	1.15	1.39	.09	.00	2.70	1.77	.99	.02	--	312	72	1.0				
					53	20	25	2		49	32	18									
		14S/02E-35001	M																		
08/29/73	5115	62.0F		350	54	13	27	2.9	0	163	82	15	1.3	.00	--	320	188				
	5050	16.7C	7.9	512	2.69	1.07	1.17	.07	.00	2.67	1.71	.42	.02	--	275	55	0.9				
					54	21	23	1		55	35	9									
		14S/02E-36E01	M																		
08/29/73	5115	62.0F		1500	210	80	85	6.3	0	352	432	201	.1	.10	--	1340	852				
	5050	16.7C	7.5	1830	10.48	6.58	3.70	.16	.00	5.77	8.99	5.67	.00	--	1188	565	1.3				
					50	31	18	1		28	44	28									
		14S/03E-19Q02	M																		
08/21/73	5115	64.0F		925	90	43	88	3.2	0	352	48	174	14.0	.00	--	609	402				
	5050	17.8C	7.7	1140	4.49	3.54	3.83	.08	.00	5.77	1.00	4.91	.23	--	633	113	1.9				
					38	30	32	1		48	8	41	2								
		14S/03E-24N01	M																		
08/08/73	5115	66.0F		475	36	14	54	1.2	0	148	4.6	77	36.0	.00	--	347	148				
	5050	18.9C	7.7	638	1.80	1.15	2.35	.03	.00	2.43	.10	2.17	.58	--	296	26	1.9				
					34	22	44	1		46	2	41	11								
		14S/03E-31Q02	M																		
07/30/73	5115	69.8F		425	41	12	30	2.7	0	152	70	10	.5	.00	--	274	152				
	5050	21.0C	7.9	462	2.05	.99	1.31	.07	.00	2.49	1.46	.28	.01	--	241	28	1.1				
					46	22	30	2		59	34	7									
		15S/03E-07D02	M																		
08/17/73	5115			340	50	13	24	2.7	0	161	72	12	1.1	.00	--	290	179				
	5050	7.9		476	2.50	1.07	1.04	.07	.00	2.64	1.50	.34	.02	--	254	47	0.8				
					53	23	22	1		59	33	8									
		16S/04E-24A01	M																		
08/10/73	5115			1500	145	76	132	4.9	0	322	444	126	65.0	.40	--	1290	674				
	5050	7.7		1770	7.24	6.25	5.74	.13	.00	5.28	9.24	3.55	1.05	--	1152	411	2.2				
					37	32	30	1		28	48	19	5								
		16S/04E-25Q01	M																		
08/15/73	5115	60.0F		750	92	33	56	3.8	0	300	160	46	19.0	.20	--	589	366				
	5050	15.5C	8.1	938	4.59	2.71	2.44	.10	.00	4.92	3.33	1.30	.31	--	558	119	1.3				
					47	28	25	1		50	34	13	3								



TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN								MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER				
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TOS SUM	TH NCH	SAR				
3-00.00 3-04.00		CENTRAL COASTAL REGION SALINAS VALLEY																			
3-04.01 165/04E-27G01		PRESSURE AREA																			
08/27/73	5115 5050	60.0F 15.5C	8.1	650 850	105 5.24 57	29 2.38 26	33 1.44 16	3.9 .10 1	0 .00	282 4.62 52	157 3.27 36	37 1.04 12	2.1 .03	.00 --	--	540 506	382 150	0.7			
3-04.02 145/03E-36A01		EAST SIDE AREA																			
08/08/73	5115 5050	60.0F 15.5C	7.6	400 607	48 2.40 46	12 .99 19	42 1.83 35	1.0 .03 1	0 .00	106 1.74 34	25 .52 10	55 1.55 30	83.0 1.34 26	.00 --	--	339 318	169 83	1.4			
3-04.03 175/05E-09Q01		FOREBAY AREA																			
08/15/73	5115 5050	60.0F 15.5C	8.1	450 592	64 3.19 51	22 1.81 29	27 1.17 19	2.7 .07 1	0 .00	211 3.46 56	97 2.02 33	25 .71 11	.0 .00	.00 --	--	369 341	251 77	0.7			
175/06E-27K01		M																			
08/23/73	5115 5050	60.0F 15.5C	7.9	895 1080	84 4.19 36	37 3.04 26	96 4.18 36	2.9 .07 1	0 .00	260 4.26 38	231 4.81 43	71 2.00 18	12.0 .19 2	.40 --	--	737 662	362 149	2.2			
175/06E-29K01		M																			
08/23/73	5115 5050	60.0F 15.5C	7.9	700 905	108 5.39 56	30 2.47 25	40 1.74 18	4.4 .11 1	0 .00	248 4.06 42	190 3.96 41	44 1.24 13	21.0 .34 4	.10 --	--	628 559	394 190	0.9			
175/06E-35F01		M																			
08/07/73	5115 5050	60.0F 15.5C	8.3	800 1010	55 2.74 27	30 2.47 24	112 4.87 48	2.9 .07 1	0 .00	220 3.61 35	222 4.62 45	71 2.00 19	6.5 .10 1	.70 --	--	636 608	263 80	3.0			
185/06E-11J01		M																			
08/07/73	5115 5050	60.0F 15.5C	7.9	860 1020	93 4.64 46	35 2.88 28	58 2.52 25	5.5 .14 1	0 .00	124 2.03 20	267 5.56 55	78 2.20 22	19.0 .31 3	.20 --	--	755 617	378 275	1.3			
3-04.05 195/07E-13D01		UPPER VALLEY AREA																			
08/27/73	5115 5050	60.0F 15.5C	7.9	1660 2110	154 7.68 33	79 6.50 28	213 9.27 39	5.4 .14 1	0 .00	426 6.98 30	576 11.99 51	123 3.47 15	68.0 1.10 5	1.10 --	--	1530 1429	711 360	3.5			
195/07E-13002		M																			
08/27/73	5115 5050	60.0F 15.5C	7.9	790 1030	78 3.89 35	36 2.96 27	93 4.05 37	2.3 .06 1	0 .00	261 4.28 40	228 4.75 44	50 1.41 13	20.0 .32 3	.40 --	--	676 636	344 129	2.2			
195/07E-23F01		M																			
08/13/73	5115 5050	64.0F 17.8C	7.6	1010 1280	114 5.69 44	49 4.03 31	74 3.22 25	2.4 .06 1	0 .00	227 3.72 29	209 4.35 34	157 4.43 34	29.0 .47 4	.20 --	--	803 746	485 300	1.5			
195/08E-32A01		M																			
08/01/73	5115 5050	64.0F 17.8C	7.7	2150 2690	133 6.64 22	112 9.21 31	314 13.66 46	1.8 .05 1	0 .00	416 6.82 23	732 15.24 51	242 6.82 23	52.0 .84 3	1.70 --	--	779 1793	792 452	4.9			
195/08E-33R01		M																			
08/01/73	5115 5050	64.0F 17.8C	7.6	2800 3330	132 6.59 17	158 12.99 34	417 18.14 48	5.8 .15 1	0 .00	335 5.49 14	1180 24.57 65	264 7.44 20	28.0 .45 1	1.70 --	--	2610 2351	981 705	5.8			
205/08E-06R01		M																			
08/02/73	5115 5050	62.0F 16.7C	7.7	650 796	56 2.79 33	31 2.55 30	70 3.05 36	1.4 .04 1	0 .00	312 5.11 61	109 2.27 27	28 .79 9	16.0 .26 3	.40 --	--	496 465	270 12	1.9			
205/08E-17P01		M																			
08/01/73	5115 5050	64.0F 17.8C	7.8	1780 2090	159 7.93 35	104 8.55 38	142 6.18 27	2.0 .05 1	0 .00	418 6.85 30	456 9.49 41	217 6.12 26	42.0 .68 3	.40 --	--	1450 1328	824 482	2.2			
3-04.08 165/02E-04L01		SEASIDE AREA																			
07/27/73	5115 5050	64.0F 17.8C	7.4	1325 1660	28 1.40 10	31 2.55 19	218 9.48 70	4.7 .12 1	0 .00	65 1.07 8	26 .54 4	412 11.62 87	12.0 .19 1	.10 --	--	898 764	198 144	6.8			
3-07.00		CARMEL VALLEY																			
165/01E-22C01		M																			
09/03/73	5115 5050	65.0F 18.3C	7.2	1010 1440	121 6.04 42	61 5.02 35	74 3.22 22	4.4 .11 1	0 .00	134 2.20 16	465 9.68 68	80 2.26 16	1.2 .02	.10 --	--	967 873	554 443	1.4			
165/01E-23F03		M																			
07/27/73	5115 5050	62.0F 16.7C	7.3	900 1210	118 5.89 49	39 3.21 27	65 2.83 24	4.1 .10 1	0 .00	118 1.93 16	392 8.16 70	58 1.64 14	.2 .00	.10 --	--	825 734	456 359	1.3			
165/01E-25B01		M																			
07/26/73	5115 5050	62.0F 16.7C	7.7	410 550	46 2.30 46	14 1.15 23	35 1.52 30	3.2 .08 2	0 .00	135 2.21 45	86 1.79 36	33 .93 19	.3 .00	.00 --	--	312 284	174 62	1.2			

TABLE E-1 (CONTINUED)  
MINERAL ANALYSES OF GROUND WATER

DATE TIME	SAMPLER LAB	TEMP	FIELD LABORATORY PH EC	MINERAL CONSTITUENTS IN					MILLIGRAMS PER LITER MILLIEQUIVALENTS PER LITER PERCENT REACTANCE VALUE					MILLIGRAMS PER LITER						
				CA	MG	NA	K	CO3	HCO3	SO4	CL	NO3	B	F	TDS SUM	TH NCH	SAR			
		3-00.00	CENTRAL COASTAL REGION																	
		3-07.00	CARMEL VALLEY																	
07/26/73	5115 5050		16S/02E-19N01 M	56.0F 13.3C	8.2	470 416	37 1.85	12 .99	26 1.13	2.9 .07	0 .00	120 1.97	62 1.29	24 .68	1.2 .02	.00	--	261 224	144 44	1.0
07/26/73	5115 5050		16S/02E-32A01 M	60.0F 15.5C	8.1	440 463	44 2.20	13 1.07	26 1.13	3.2 .08	0 .00	151 2.47	49 1.02	31 .87	4.6 .07	.00	--	287 245	165 40	0.9
07/23/73	5115 5050		17S/03E-21H01 M	66.0F 18.9C	8.0	980 1150	112 5.59	36 2.96	83 3.61	4.3 .11	0 .00	368 6.03	156 3.25	100 2.82	.7 .01	.00	--	734 673	430 126	1.7
07/26/73	5115 5050		18S/04E-06A01 M	68.0F 20.0C	8.0	850 1070	116 5.79	32 2.63	62 2.70	4.3 .11	0 .00	340 5.57	158 3.29	76 2.14	4.9 .08	.10	--	638 620	424 143	1.3
08/27/73	5115 5050		16S/01W-13L01 M	61.0F 16.1C	7.9	700 912	85 4.24	26 2.14	59 2.57	4.0 .10	0 .00	242 3.97	130 2.71	82 2.31	1.3 .02	.00	--	530 506	321 121	1.4
08/27/73	5115 5050		16S/01W-13002 M	60.0F 15.5C	8.1	800 971	81 4.04	38 3.13	67 2.91	3.7 .09	0 .00	244 4.00	158 3.29	92 2.59	1.4 .02	.10	--	585 561	358 159	1.5
		3-26.00	WEST SANTA CRUZ TERRACE																	
06/20/73	5050 1445		11S/02W-19A01 M	62 F 17 C	7.6 8.3	1600 1370	13 .65	6.0 .49	256 11.14	2.5 .06	0 .00	230 3.77	107 2.23	223 6.29	12.0 .19	1.20	--	756 734	57 0	14.7
06/15/73	5050 1215		11S/02W-21H01 M	68 F 20 C	7.3 8.1	800 644	52 2.59	6.4 .53	60 2.61	3.1 .08	0 .00	98 1.61	127 2.64	60 1.69	2.1 .03	.20	--	395 359	156 76	2.1
06/15/73	5050 0930		11S/02W-22M01 M	71 F 22 C	7.3 8.0	1050 923	56 2.79	8.4 .69	114 4.96	4.4 .11	0 .00	121 1.98	132 2.75	128 3.61	4.5 .07	.50	--	546 507	174 75	3.8



TABLE E-2

## MINOR ELEMENT ANALYSIS OF GROUND WATER

State Well Number	Date Sampled	Constituents in Milligrams per Liter*						
		Arsenic Lithium	Barium Manganese	Cadmium Mercury	Chromium Selenium	Copper Strontium	Iron Zinc	Lead
NORTH COASTAL REGION 1-00.00								
SANTA ROSA VALLEY 1-18.00								
SANTA ROSA AREA 1-18.01								
06N/09W-03R84 M	5-24-73	0.00d 0.01d	-- --	-- --	-- --	-- --	-- --	-- --
07N/08W-30P01 M	7-26-73	-- --	-- 0.01t	-- --	-- --	-- --	0.00t --	-- --
07N/09W-09F01 M	7-26-73	-- --	-- 0.04t	-- --	-- --	-- --	2.9t --	-- --
08N/09W-13J80 M	7-17-73	0.02d 0.05d	-- 0.97t	-- --	-- --	-- --	0.33t --	0.00t --
MISCELLANEOUS AREA 1-80.00								
05N/08W-21L01 M	7-17-73	0.00d 0.00d	-- 0.00t	-- --	-- --	-- --	0.14t --	0.00t --
06N/10W-36N80 M	7-17-73	0.00d 0.00d	-- 0.01t	-- --	-- --	-- --	0.59t --	0.00t --
06N/11W-22K01 M	7-17-73	0.00d 0.00d	-- 0.00t	-- --	-- --	-- --	0.02t --	0.00t --
08N/07W-05K80M	5-16-73	0.00d 0.08d	-- --	-- --	-- --	-- --	-- --	-- --
09N/13W-32R01 M	5-16-73	0.00d 0.02d	-- --	-- --	-- --	-- --	-- --	-- --
10N/10W-23B03 M	5-17-73	0.00d 0.02d	-- --	-- --	-- --	-- --	-- --	-- --
10N/13W-07N80M	5-16-73	0.00d 0.00d	-- --	-- --	-- --	-- --	-- --	-- --
10N/14W-12P80 M	5-17-73	0.00d 0.06d	-- --	-- --	-- --	-- --	-- --	-- --
LOWER RUSSIAN RIVER VALLEY 1-98.00								
07N/11W-14E02 M	5-16-73	-- 0.00d	-- --	-- --	-- --	-- --	-- --	-- --
SAN FRANCISCO BAY REGION 2-00.00								
PETALUMA VALLEY 2-01.00								
03N/06W-16H01 M	7-27-73	-- --	-- 0.00t	-- --	-- --	-- --	0.51t --	-- --
04N/06W-08E01 M	7-27-73	-- --	-- 0.01t	-- --	-- --	-- --	0.03t --	-- --
04N/06W-21F80 M	5-17-73	0.00d 0.06d	-- --	-- --	-- --	-- --	-- --	-- --
04N/06W-27N01 M	5-17-73	0.00d 0.03d	-- --	-- --	-- --	-- --	-- --	-- --
05N/06W-33H80 M	5-17-73	0.03d 0.03d	-- --	-- --	-- --	-- --	-- --	-- --
05N/07W-20L03 M	5-16-73	0.00d 0.04d	-- --	-- --	-- --	-- --	-- --	-- --
NAPA-SONOMA VALLEY 2-02.00								
SONOMA VALLEY 2-02.01								
04N/05W-03C01 M	5-16-73	0.01d 0.04d	-- --	-- --	-- --	-- --	-- --	-- --
04N/05W-34D80 M	5-16-73	-- 0.04d	-- --	-- --	-- --	-- --	-- --	-- --
05N/05W-19L01 M	5-16-73	0.00d 0.04d	-- --	-- --	-- --	-- --	-- --	-- --
05N/05W-28R01 M	7-30-73	-- --	-- 0.03t	-- --	-- --	-- --	0.10t --	-- --
SANTA CLARA VALLEY 2-09.00								
SOUTH BAY AREA 2-09.02								
06S/02W-20N01 M	7-09-73	0.0000 0.000	0.0 0.00	0.000 0.0004	0.002 0.0003	0.00 0.36	0.00 0.00	0.000 0.000

\* d = dissolved, t = total

## Appendix F

### WASTE WATER DATA

Appendix F, "Waste Water Data", which appeared in certain volumes of Bulletin No. 130 series, has been discontinued. For information regarding waste water, the reader is referred to the recently reactivated Bulletin No. 68 series: "Inventory of Waste Water Production and Waste Water Reclamation Practices in California".

Please note the data presented in Bulletin No. 68 are on a calendar year basis rather than a water year basis as is the case in Bulletin No. 130.









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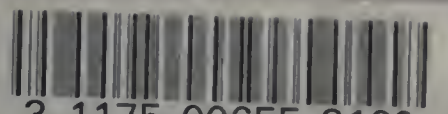
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